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LAIRD TECHNOLOGIES Wireless System Modules

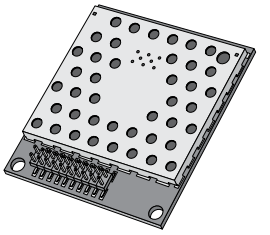
Products may be RoHS compliant.
Check mouser.com for RoHS status.

AC4490 & AC4790 OEM TRANSCEIVER FAMILY

3.3V, 1 Watt Transmit

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Laird Technologies Part No.	Description	Price Each 1	Price Each 50
AC4490 Series - Server/Client Protocol				
814-AC4490-1000M	AC4490-1000M	900MHz FHSS module w/ MMCX ant. connector		
814-AC4490LR-1000M	AC4490LR-1000M	900MHz FHSS mod. w/ MMCX ant. connector, longer range version		
814-AC44901000M485	AC4490-1000M-485	900MHz FHSS module w/ MMCX ant. connector, RS485		
814-SDKAC44901000M	SDK-AC4490-1000M	AC4490-1000M Developer Kit		
814-SDK-4490LR-1000M	SDK-AC4490LR-1000M	AC4490LR-1000M Developer Kit		
AC4790 Series - Peer-to-Peer Protocol				
814-AC4790-1000M	AC4790-1000M	900MHz FHss module w/MMCX ant. connector		
814-AC4790LR-1000M	AC4790LR-1000M	900MHz FHSS mod. w/ MMCX ant. connector, longer range version		
814-AC47901000M485	AC4790-1000M-485	900MHz FHSS module w/ MMCX ant. connector, RS485		
814-SDK-AC47901000M	SDK-AC4790-1000M	AC4790-1000M Developer Kit		
814-SDK-AC4790LR-1KM	SDK-AC4790LR-1000M	AC4790LR-1000M Developer Kit		

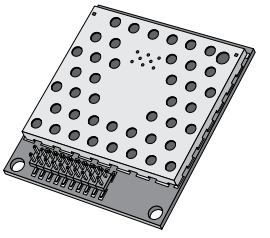


Compact AC4490 900MHz transceivers can replace miles of cable in harsh industrial environments. Using field-proven FHSS technology that needs no additional site licensing ✻, AC4490s reject interference, enable co-located system operation, increase output power and maintain data integrity.

AC4490s feature drop-in installation and a number of on-the-fly control commands, providing OEMs with a versatile interface for any application. They can be used as direct wire replacements, requiring no special host software for communication. All frequency hopping, synchronization and RF system data transmission/ reception is performed by the transceiver.

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Laird Technologies Part No.	Description	Price Each 1	Price Each 50
AC4490 Series - Server/Client Protocol				
814-AC4490-200M	AC4490-200M	900MHz FHSS module w/ MMCX ant. connector		
814-AC4490LR-200M	AC4490LR-200M	900MHz FHSS mod. w/ MMCX ant. connector, longer range version		
814-AC4490200M5485	AC4490-200M-485	900MHz FHSS module w/ MMCX ant. connector, RS485		
814-AC4490200A5485	AC4490-200A-485	900MHz FHSS module w/ integral ant., RS485		
814-SDK-AC4490200M	SDK-AC4490-200M	AC4490-200M Developer Kit		
814-SDK-4490LR-200M	SDK-AC4490LR-200M	AC4490LR-200M Developer Kit		
814-SDK-AC4490200A	SDK-AC4490-200A	AC4490-200A Developer Kit		
AC4790 Series - Peer-to-Peer Protocol				
814-AC4790-200M	AC4790-200M	900MHz FHSS module w/ MMCX ant. connector		
814-AC4790LR-200M	AC4790LR-200M	900MHz FHSS mod. w/ MMCX ant. connector, longer range version		
814-AC4790-200M485	AC4790-200M-485	900MHz FHSS module w/ MMCX ant. connector, RS485		
814-AC4790-200A	AC4790-200A	900MHz FHSS module w/ integral ant.		
814-AC4790-200A485	AC4790-200A-485	900MHz FHSS module w/ integral ant., RS485		
814-SDK-AC4790-200M	SDK-AC4790-200M	AC4790-200M Developer Kit		
814-SDK-AC4790LR200M	SDK-AC4790LR-200M	AC4790LR-200M Developer Kit		
814-SDK-AC4790-200A	SDK-AC4790-200A	AC4790-200A Developer Kit		



High-performance AC4790 transceivers utilize Laird's "masterless" protocol, allowing each transceiver to communicate with any other in-range transceiver for true peer-to-peer operation.

AC4790's protocol features a dynamic addressing scheme, which simplifies the most efficient transmission path, so OEMs can design routing sequences that optimize the RF network. This makes AC4790 ideal for a wide variety of RF network. This makes AC4790 ideal for a wide variety of industrial applications that must rely on smooth, constant data flow.

Accessories

For quantities greater than listed, call for quote.

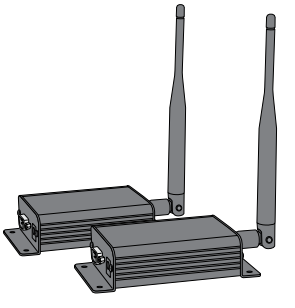
MOUSER STOCK NO.	Laird Technologies Part No.	Description	Price Each
814-0700-00012	0700-00012	Amtec 20 pin Mating Connector for AC44XX	
814-0650-00005	0650-00005	Power Supply, 7.5 VDC, 1.5 A, Sw. Reg., 100 - 240 VAC input	
814-0600-00019	0600-00019	S467FL-5-RMM-915S, 1/2 wave, 7", 2dBi, RA, MMCX plug	
814-0600-00025	0600-00025	S467FL-5-RMM-915, 1/2 wave, 7", 2dBi, MMCX plug	
814-0600-00024	0600-00024	S467AH-915S, 1/2 wave, 7", 2dBi, RA, RPSMA	
814-0600-00027	0600-00027	S467AH-915, 1/2 wave, 7", 2dBi, RPSMA	
814-0600-00028	0600-00028	S161AH-915R, 1/2 wave, 6", 2.5dBi, RA, RPSMA	
814-0600-00029	0600-00029	S161AH-915, 1/2 wave, 6", 2.5dBi, RPSMA	
814-0600-00030	0600-00030	S331AH-915, 1/4 wave, 3.5", 1dBi, RPSMA	
814-1300-00023	1300-00023	5" RG178 coax, RA MMCX plug to RPSMA bulkhead	

900MHZ / 2.4GHZ CONNEX LINK™

ConnexLink stand-alone transceivers can be set up in minutes to virtually cut the cables between RS232 or RS485 devices. Their flexibility and price allow users to quickly upgrade wired terminals to cordless operation in industrial, commercial, even residential applications.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Laird Technologies Part No.	Description	Price Each
900MHz Models - 1000mW- Server/Client Protocol			
814-CL4490-232-C	CL4490-1000-232	Client Only Unit Kit includes Transceiver (Client Config.), RS-232 cable, Antenna, Power Supply and Software (Requires a Server Unit)	
814-CL4490-232-SP	CL4490-1000-232-SP	Starter Pack includes both a Server and Client Unit, RS-232 cables, Antennas, Power Supplies and Software	
814-CL4490-1000PROSP	CL4490-1000-PRO-SP	900 MHz RS232/RS485/RS422 Switching InterfC Transvr Starter Pack 1.0 Watt (Server/Client protocol)	
900MHz Models - 1000mW- Peer-to-Peer Protocol			
814-CL4790-232	CL4790-1000-232	Single Unit Kit (Peer to Peer Protocol) includes Transceiver, RS-232 cable, Antenna, Power Supply and Software	
814-CL4790-232-SP	CL4790-1000-232-SP	Starter Pack (Peer to Peer Protocol) includes Two Transceiver Units, RS-232 cables, Antennas, Power Supplies and Software	
Connex Link™ Accessories			
814-2200-00076	2200-00076	CL4424-100-232 PC Board only RS-232 with DB-9 (No Package)	
814-2200-00122	2200-00122	CL4490-1000-232 PC Board only RS-232 with DB-9 (No Package)	
814-1300-00032	1300-00032	Null-Modem Cable (replaces standard cable if connecting Aerocomm units to DCE devices)	



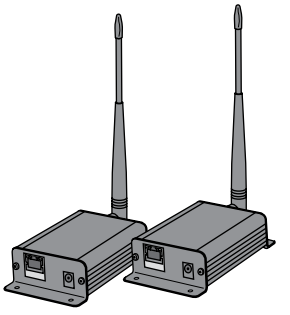
CONNEX LINK™

900MHZ FHSS CONNEXNET™

ConnexNet provides a complete hardware and software solution for adding wireless network connectivity to serial-based applications. The transceiver serves as a conduit between the user and multiple destination devices via a local network or Internet connection. It integrates a fully developed TCP/IP network stack and OS using a variety of network protocols to make distant networking both easy and reliable.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Laird Technologies Part No.	Description	Price Each
Server/Client Protocol			
814-CN4490-232-SP	CN4490-1000-232-SP	Starter Pack - includes one ConnexNet and one ConnexLink RS232 serial unit CN4490-1000-232-SP	



CONNEXNET™

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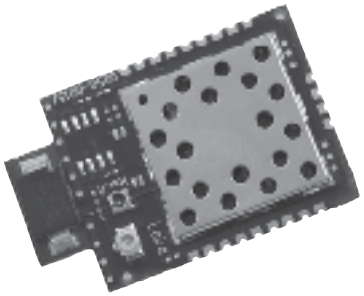
FLEXRF® 2.4GHZ WIRELESS MODULE

2.4GHz OEM Transceiver Family

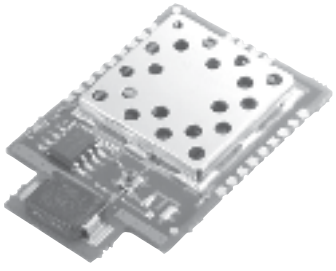


Laird Technologies' fifth generation 2.4GHz FHSS module sets the standard for industrial RF communication. Based on proprietary FlexRF™ technology, this globally-accepted module will exceed most OEM application and performance requirements. Embedded with Laird Technologies' robust server-client protocol, the LT2510 permits an unlimited number of clients to synchronize to a single server for low latency communications. The server and all clients in a network can communicate with any radio in range via either addressed or broadcast packets. The configuration and test software allows OEMs to design and test networks to suit their applications. Enhanced API commands provide packet routing control and network intelligence. With its field-proven FHSS air interface protocol, the LT2510 rejects RF noise, excels in multipath scenarios, allows for co-located systems, and provides an extremely reliable communication link. It also provides a more robust, but simpler, link than ZigBee for RF applications that do not require a mesh topology. With a throughput of up to 250Kb/s in half-duplex mode, LT2510 delivers speedy data rates. In addition, variable output power options (up to +21dBm) enable communication over distances that aren't achievable with competing technologies. At the same time, a range of ultra-low power modes plus low Tx/Rx power consumption make the LT2510 ideal for power-restrictive or battery-operated applications. The mini SMT package is well-suited for space-constrained designs and is available in pick-and-place packaging for volume manufacturing.

MOUSER STOCK NO.	Laird Tech Part No.	Description	Approved Countries	Price Each 1	Price Each 50
LT2510, Industrial Temperature (-40° to 80°C)					
814-PRM110	PRM110	2.4GHz OEM Transceiver, SMT, 3.3V TTL, 100mW, u.FL Jack	USA		
814-PRM111	PRM111	2.4GHz OEM Transceiver, SMT, 3.3V TTL, 100mW, Chip Ant	USA		
814-PRM112	PRM112	2.4GHz OEM Transceiver, SMT, 3.3V TTL, 100mW, u.FL Jack, CE Approved	Worldwide		
814-PRM113	PRM113	2.4GHz OEM Transceiver, SMT, 3.3V TTL, 100mW, Chip Ant, CE Approved	Worldwide		
814-PRM120	PRM120	2.4GHz OEM Transceiver, Pluggable, 3.3V TTL, 100mW, u.FL Jack	USA		
814-PRM121	PRM121	2.4GHz OEM Transceiver, Pluggable, 3.3V TTL, 100mW, Chip Ant	USA		
814-PRM122	PRM122	2.4GHz OEM Transceiver, Pluggable, 3.3V TTL, 100mW, u.FL Jack, CE Approved	Worldwide		
814-PRM123	PRM123	2.4GHz OEM Transceiver, Pluggable, 3.3V TTL, 100mW, Chip Ant, CE Approved	Worldwide		
LT2510 Developer Kit & Eval Boards, Industrial Temperature (-40° to 80°C)					
814-DVK-PRM110	DVK-PRM110	LT2510 Developer Kit, SMT, 3.3V TTL, 100mW, u.FL Jack	USA		-
814-EVB-PRM110-U	EVB-PRM110-U	LT2510 USB Eval Board, SMT, 3.3V TTL, 100mW, u.FL Jack	USA		-
814-EVB-PRM110-R	EVB-PRM110-R	LT2510 RS232 Eval Board, SMT, 3.3V TTL, 100mW, u.FL Jack	USA		-
814-DVK-PRM111	DVK-PRM111	LT2510 Developer Kit, SMT, 3.3V TTL Serial, 100mW, Chip Ant	USA		-
814-EVB-PRM111-U	EVB-PRM111-U	LT2510 USB Eval Board, SMT, 3.3V TTL Serial, 100mW, Chip Ant	USA		-
814-EVB-PRM111-R	EVB-PRM111-R	LT2510 RS232 Eval Board, SMT, 3.3V TTL Serial, 100mW, Chip Ant	USA		-
814-DVK-PRM112	DVK-PRM112	LT2510 Developer Kit, SMT, 3.3V TTL, 100mW, u.FL Jack, CE Approved	Worldwide		-
814-EVB-PRM112-U	EVB-PRM112-U	LT2510 USB Eval Board, SMT, 3.3V TTL, 100mW, u.FL Jack, CE Approved	Worldwide		-
814-EVB-PRM112-R	EVB-PRM112-R	LT2510 RS232 Eval Board, SMT, 3.3V TTL, 100mW, u.FL Jack, CE Approved	Worldwide		-
814-DVK-PRM113	DVK-PRM113	LT2510 Developer Kit, SMT, 3.3V TTL Serial, 100mW, Chip Ant, CE Approved	Worldwide		-
814-EVB-PRM113-U	EVB-PRM113-U	LT2510 USB Eval Board, SMT, 3.3V TTL Serial, 100mW, Chip Ant, CE Approved	Worldwide		-
814-EVB-PRM113-R	EVB-PRM113-R	LT2510 RS232 Eval Board, SMT, 3.3V TTL Serial, 100mW, Chip Ant, CE Approved	Worldwide		-
814-DVK-PRM120	DVK-PRM120	LT2510 Developer Kit, Pluggable, 3.3V TTL Serial, 100mW, u.FL Jack	USA		-
814-DVK-PRM121	DVK-PRM121	LT2510 Developer Kit, Pluggable, 3.3V TTL Serial, 100mW, Chip Ant	USA		-
814-DVK-PRM122	DVK-PRM122	LT2510 Developer Kit, Pluggable, 3.3V TTL Serial, 100mW, u.FL Jack, CE Approved	Worldwide		-
814-DVK-PRM123	DVK-PRM123	LT2510 Developer Kit, Pluggable, 3.3V TTL Serial, 100mW, Chip Ant, CE Approved	Worldwide		-

ZB2430 OEM ZIGBEE TRANSCEIVER FAMILY

Long Range "ZB2430" OEM ZigBee Transceivers (2.4GHz, 3V, 2-100mW)



Based on Texas Instruments' leading edge 802.15.4 SoC & Z-Stack™ technology, ZB2430 is one of the most powerful ZigBee-compliant solutions on the market today. It provides OEMs with industry-leading 2.4GHz module performance in low power conservation, ease of integration, range, features and functionality. ZB2430 is ideal for power-restricted or battery-powered applications. Its receive and powerdown performance offer OEMs the lowest power consumption of any comparable transceiver module. Since it operates in the 2.4GHz ISM band, the module can be used globally—allowing OEMs to standardize on a single platform. Although the IEEE 802.15.4 (PHY & MAC) and ZigBee stack are industry standards, our flexible approach allows OEMs to customize a solution specific to their application needs. With the embedded Z-stack, ZB2430 is aimed squarely at secure, low-power, mesh network applications. Modules are offered as Coordinators, Routers or End Devices. Network scan, remote configuration, dynamic routing, discovery, security... All unleash the full power of ZigBee. The Development Kit platform and test utility allow the OEM to explore the best of ZigBee—straight out of the box.

MOUSER STOCK NO.	Laird Tech Part No.	Description	Approved Countries	Price Each 1	Price Each 50
High Power ZigBee Coordinator					
814-Z100S1AFC	Z100S1AFC	Zigbee Coordinator, SMT, 100mW, OTA, Chip Antenna	Worldwide		
814-Z100S1UFC	Z100S1UFC	Zigbee Coordinator, SMT, 100mW, OTA, u.FL Jack	Worldwide		
High Power ZigBee Router					
814-Z100S1AFR	Z100S1AFR	Zigbee Router, SMT, 100mW, OTA, Chip Antenna	Worldwide		
814-Z100S1UFR	Z100S1UFR	Zigbee Router, SMT, 100mW, OTA, u.FL Jack	Worldwide		
High Power ZigBee End Device					
814-Z100S1AFE	Z100S1AFE	Zigbee End Device, SMT, 100mW, OTA, Chip Antenna	Worldwide		
814-Z100S1UFE	Z100S1UFE	Zigbee End Device, SMT, 100mW, OTA, u.FL Jack	Worldwide		
High Power ZigBee Developer Kits - Surface Mount Package					
814-EVB-Z100S1AFC	EVB-Z100S1AFC	Zigbee Eval Board Coordinator-USB, 100mW, OTA, SMT, Chip Ant	Worldwide		-
814-EVB-Z100S1AFC-2	EVB-Z100S1AFC-2	Zigbee Eval Board Coordinator-RS232, 100mW, OTA, SMT, Chip Ant	Worldwide		-
814-EVB-Z100S1UFC	EVB-Z100S1UFC	Zigbee Eval Board Coordinator-USB, 100mW, OTA, SMT, u.FL Jack	Worldwide		-
814-EVB-Z100S1AFC-2	EVB-Z100S1AFC-2	Zigbee Eval Board Coordinator-RS232, 100mW, OTA, SMT, u.FL Jack	Worldwide		-
814-EVB-Z100S1AFR	EVB-Z100S1AFR	Zigbee Eval Board Router-RS232, 100mW, OTA, SMT, Chip Ant	Worldwide		-
814-EVB-Z100S1UFR	EVB-Z100S1UFR	Zigbee Eval Board Router-RS232, 100mW, OTA, SMT, u.FL Jack	Worldwide		-
814-EVB-Z100S1AFE	EVB-Z100S1AFE	Zigbee Eval Board End Device-RS232, 100mW, OTA, SMT, Chip Ant	Worldwide		-
814-EVB-Z100S1UFE	EVB-Z100S1UFE	Zigbee Eval Board End Device-RS232, 100mW, OTA, SMT, Chip Ant	Worldwide		-
2.4 GHz Accessories					
814-0650-00005	0650-00005	Power Supply, 7.5 VDC, 1.5 A, Sw. Reg., 100 - 240 VAC input	Worldwide		
2.4 GHz Antennas & Cables					
814-0600-00040	0600-00040	S181FL-6-PX-2450S, 1/2 wave, 5", 2dBi, RA, u.FL plug	Worldwide		-
814-0600-00014	0600-00014	S181AH-2450S, 1/2 wave, 5", 2dBi, RA, RPSMA	Worldwide		
814-0600-00039	0600-00039	S151FL-5-PX-2450S, 7", 5dBi, RA, u.FL plug	Worldwide		-
814-0600-00010	0600-00010	S151AH-2450S, 7", 5dBi, RA, RPSMA	Worldwide		

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LAIRD TECHNOLOGIES Wireless System Modules

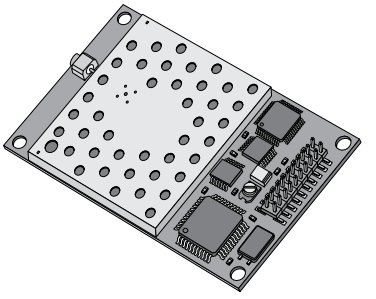
868MHZ AC4486/4868 SERIES - WIRELESS TRANSCEIVER MODULES

Compact 868MHz transceivers can replace miles of cable in harsh environments. Using field-proven RF technology which needs no additional ETSI (Europe) licensing, OEMs with little or no previous RF experience can easily and quickly make existing systems wireless.

RoHS Compliant

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Laird Tech Part No.	Description	Approved Countries	Price Each 1	Price Each 50
5mW Variable Modules					
814-AC4486-5M	AC4486-5M	868MHz transceiver, TTL serial RS232, 0–250mW, MMCX antenna	World Wide		
814-AC4486-5A	AC4486-5A	868MHz transceiver, TTL serial RS232, 0–250mW, integral antenna	World Wide		
250mW Variable Modules					
814-AC4868-250M	AC4868-250M	868MHz transceiver, TTL serial RS232, 0–250mW, MMCX antenna	World Wide		
868MHz Development Kits					
814-SDK-AC4868-250M	SDK-AC4868-250M	AC4868-250M Development Kit	World Wide		-
868MHz Antennas					
814-0600-00020	0600-00020	1/2 Wave Antenna, 7", 2dBi, RA, MMCX plug	-		
814-1300-00023	1300-00023	5" RG178 Coax Cable, RA MMCX plug to RPSMA bulkhead	-		
868MHz Accessories					
814-0700-00012	0700-00012	Samtec 20-pin mating connector	-		
814-0650-00005	0650-00005	Power Supply, 7.5 VDC, 1.5 A, Sw. Reg., 100-240 VAC Input	-		



BLUETOOTH/WIRELESS W-LAN MODULE KITS

The development board allows the Laird Bluetooth or Wireless W-LAN Module to be connected to a PC. The development board provides RS-232 level conversion through a standard 9 way D type connector to all pins of the 40 way and a 50 way Hirose connectors used by Bluetooth or Wireless LAN interface.

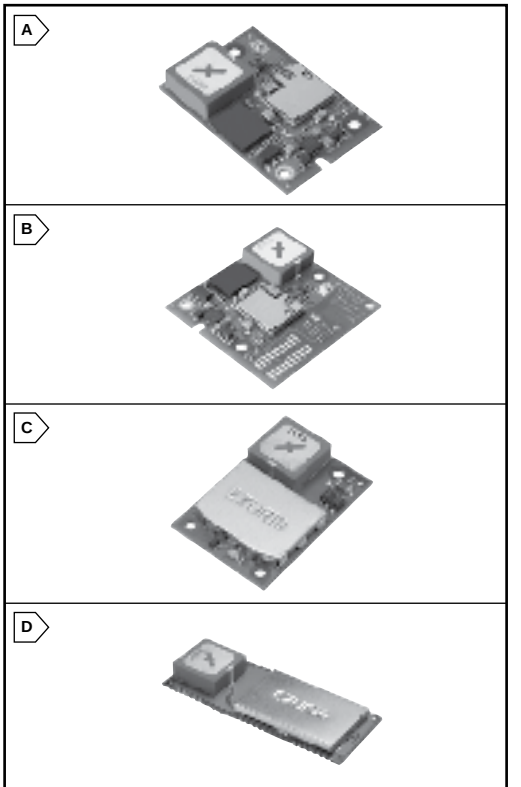
MOUSER STOCK NO.	Laird Tech Part No.	Description	Price Each
Bluetooth or Wireless LAN Module Kits			
239-BISDK02BI-02	BISDK02BI-02	BISMII & High Speed USB adapter	
239-BISDK02BI-03	BISDK02BI-03	LAN 802.11, BISMII & High Speek USB adaptor	
239-WISDK01BI-02	WISDK01BI-02	LAN 802.11 & WISM Module	
Accessories			
239-ACC-005	ACC-005	Winbond W681360 Audio Codec Board	
239-CWAA-00005-01	CWAA-00005-01	3.6mm Richco Mounting Pillars	

LAN/BLUETOOTH MODULES

Whether your requirement is for Bluetooth or Wireless LAN, Laird's embedded modules are designed with compatibility in mind. LAN module and Laird's Bluetooth Intelligent Serial technology. The pin configuration and physical dimensions of both the Wireless Module (BISM) are the same giving you the choice of wireless.

The Intelligent Wireless LAN module is a fully integrated 802.11b/g module that is designed for embedded applications where an 802.3interface is required. The module provides a UART connection to the host system. An integrated ARM processor runs the wireless network drivers for the 802.11b/g radio. With its integrated +2dB gain antenna it provides a complete 802.11b/g solution in a single module.

MOUSER STOCK NO.	Laird Tech Part No.	Fig.	Description	Price Each
Laird LAN Modules				
239-WISMC01BI	WISMC01BI	A	802.11b/g UW TCP/IP - Hirose 40pin	
239-WISMC03BI	WISMC03BI	A	802.11b/g SLIP - Hirose 40 pin	
239-WISMC04BI	WISMC04BI	B	802.11b/g UW TCP/IP - Hirose 50pin	
Laird Bluetooth Modules				
239-TRBLU23-00200	TRBLU23-00200	C	BISMII Bluetooth v2.0 Module	
239-TRBLU23-00300	TRBLU23-00300	C	BISMII - uFL connector	
239-BTM411	BTM411	-	Class 2 Bluetooth AT Data Module, Internal Antenna	
239-DVK-BTM411	DVK-BTM411	-	Bluetooth AT Data Module, Internal Antenna Dev Kit	
239-BTM402	BTM402	C	BISM II - Power Amp (PA)	
239-BISMS02BI	BISMS02BI	D	Surface Mount BISM II	
239-BISMS02BI-NA	BISMS02BI-NA	D	Surface Mount BISM II - uFL connector	
239-BRBLU03-010A0	BRBLU03-010A0	-	High Speed Bluetooth USB Adapter	
239-BTM410	BTM410-01	-	BlueTooth DATA Module AT Module	
239-DVK-BTM410	DVK-BTM410-01	-	Dev Kit / BlueTooth DATA Module AT Module	
239-BTM420	BTM420-01	-	BlueTooth DATA Module HCI	
239-DVK-BTM420	DVK-BTM420-01	-	Dev Kit / BlueTooth DATA Module HCI	
239-BTM421	BTM421-01	-	BlueTooth DATA Module HCI	
239-DVK-BTM421	DVK-BTM421-01	-	Dev Kit / BlueTooth DATA Module HCI	
239-BTM510	BTM510-01	-	BlueTooth Multimedia, (formerly BlueTooth Voice)	
239-BTM511	BTM511-01	-	BlueTooth Multimedia, (formerly BlueTooth Voice)	
239-DVK-BTM510	DVK-BTM510-01	-	Dev Kit / BlueTooth M2M	
239-BTM520	BTM520-01	-	BlueTooth Multimedia Plus, (formerly BISM3)	
239-BTM521	BTM521-01	-	BlueTooth Multimedia Plus, (formerly BISM3)	
239-DVK-BTM520	DVK-BTM520-01	-	Dev Kit / BlueTooth M2M	



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ANTENOVA GPS Modules and Chip Antennas

antenova®

GPS RADIONOVA RF M10214-A1 ANTENNA MODULE

The world's smallest RF antenna module incorporating a SiRFstarIII GPS chipset and optimized with Antenova's high efficiency complementary GPS antenna. This is a flash based highly integrated GPS RF Antenna Module suitable for L1-band GPS and A-GPS systems. The device is based on the high performance SiRFstarIII™ GPS architecture combined with Antenova's high efficiency complementary antenna technology.

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Antenova Part No.	Description	Dimensions	Price Each 1	Price Each 10
237-M10214-A	M10214-A1	GPS Radionova RF Antenna Module	43 x 9 x 4 mm		
Connector Hardware					
538-53309-1670	53309-1670	Molex 16P Right Angle SMT Connector	--		
383-3M0H01	H003M0-H01C000RR	1-Pos Pogo Pin Connector 90°	--		

GPS RADIONOVA M10214-K1 EVALUATION KIT AND HARDWARE

A complete GPS solution in a box for the development of GPS enabled devices. This provides the necessary hardware and procedures for the proper evaluation of Antenova's GPS RADIONOVA® M10214-A1 RF Antenna Module's. Allows users to develop a complete working GPS solution and become experienced with the benefits of the RF antenna modules earlier in the design cycle. Kit contains: 2 GPS Modules, 1 Test Board, 1 USB Cable, Printed User Guide and CD-ROM w/ documentation.

MOUSER STOCK NO.	Antenova Part No.	Description	Price Each
237-M10214-A-K	M10214-K1	GPS Radionova RF Development Kit	

GIGANOVA® WIRELESS ANTENNAS

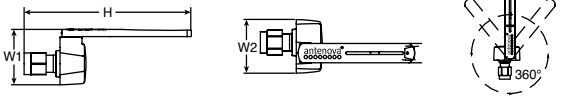
Antenova offers the gigaNOVA® range of market leading standard antenna solutions for 2.3GHz, 2.4GHz, 2.5GHz, 5GHz, GPS, GSM and ISM900 bands. Designed for ease of integration into wireless devices, they are the smart choice for GPS, Bluetooth, Wi-Fi, ZigBee, WiMAX and cellular M2M applications. The gigaNOVA® line of antennas offers external swivel antennas and internal SMD and snap-in antennas.

gigaNOVA® External Antennas

Intended for SMA mounting

Specifications:

- Frequency: 2.4GHz
- Operating Temperature: -40 to + 85°C
- Impedence: 50Ohm
- Antenna type: Swivel



For quantities of 100 and up, call for quote.

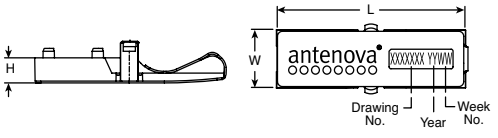
MOUSER STOCK NO.	Antenova Part No.	Weight (gram)	Dimensions W1 x W2 x H	Description	Price Each 1	Price Each 10	Price Each 50
237-2010B4844-01	B4844-01	7.1g	20 x 19.5 x 62.5 mm	Titanis 2.4GHz Swivel SMA Antenna			

gigaNOVA® Internal Snap-In Antennas

MOUSER STOCK NO.	Description	Price Each
237-RB-FLAVUS-2.4	Reference Board for Flavus 2.4GHz	
237-RB-FLAV-868-915	Reference Board for Flavus 868/915MHz	
237-1020B5812-04-U1	Reference Board for Flavus GSM	

Specifications:

- Frequency: 2.4GHz, 868/915MHz or Pentaband (GSM850/GSM 900/DCS1800/PCS 1900/WCDMA)
- Operating Temperature: -40 to + 85°C
- Impedence: 50Ohm
- Antenna type: Snap-in



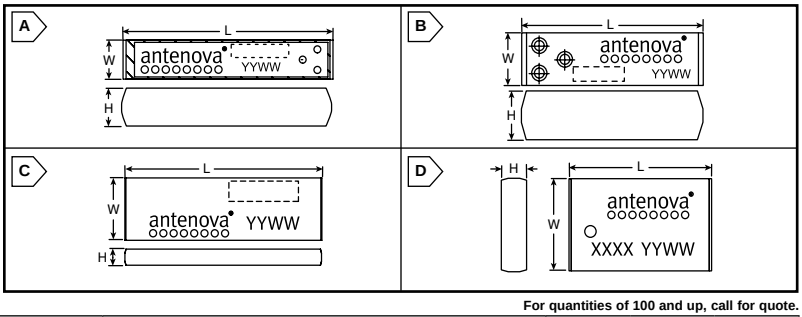
For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Antenova Part No.	Weight (gram)	Dimensions W1 x W2 x H	Description	Price Each 1	Price Each 10	Price Each 50
237-1020B5812-01	B5812-01	0.6g	27.3 x 7.9 x 3.45mm	Flavus 868/915 or Pentaband Snap-In Antenna for 0.8mm PCB			
237-1020B5812-04	B5812-04	0.6g	27.3 x 7.9 x 3.45mm	Flavus 868/915 or Pentaband Snap-In Antenna for 1.6mm PCB			

gigaNOVA® Internal SMD Chip Antennas

Antenova's Reflexus A10315 and Calvus A10340 are the newest addition to their gigaNOVA Internal SMD Chip Antenna offering. The two new cellular penta-band SMD antennas are designed for ease of integration into wireless devices. The Reflexus A10315 and Calvus A10340 antennas are ideally suited for an extensive range of embedded cellular applications such mobile handsets, femto base stations, vehicle tracking, remote monitoring and other M2M applications.

MOUSER STOCK NO.	Description	Price Each
237-RB-COMATA	Reference Board for Comata 2.4GHz	
237-AN-1-0668-4	Reference Board for Mixtus 2.4/5GHz	
237-RB-RUFA-LT	Reference Board for Rufa Left 2.4GHz	
237-RB-RUFA-RT	Reference Board for Rufa Right 2.4GHz	
237-RB-IMPEXA-LT	Reference Board for Impexa Left 2.4GHz	



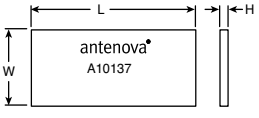
For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Antenova Part No.	Fig.	Weight (gram)	Dimensions W1 x W2 x H	Description	Price Each 1	Price Each 10	Price Each 50
237-3030A5645-01	A5645	A	0.5g	20.5 x 3.6 x 3.3mm	Mica 2.4GHz SMD Chip Antenna			
237-3030A6111-01	A6111	B	0.3g	12.8 x 3.6 x 3.3mm	Comata 2.4GHz SMD Chip Antenna			
237-A10194	A10194	D	0.2g	10.4 x 10.4 x 0.8mm	Mixtus Dual-Band 2.4/5GHz Wi-Fi SMD Chip Antenna			
237-3030A5839-01	A5839	C	0.1g	12.8 x 3.9 x 1.1mm	Rufa 2.4GHz SMD Chip Antenna Left Feed			
237-3030A5887-01	A5887	C	0.1g	12.8 x 3.9 x 1.1mm	Rufa 2.4GHz SMD Chip Antenna Right Feed			
237-3030A6150-01	A6150	D	0.05g	6.1 x 3.9 x 1.1mm	Impexa 2.4GHz SMD Chip Antenna Left Feed			
237-3030A6250-01	A6250	D	0.05g	6.1 x 3.9 x 1.1mm	Impexa 2.4GHz SMD Chip Antenna Right Feed			
237-A10192-L	A10192	D	<0.03g	4.0 x 3.0 x 1.1mm	Fusca 2.4GHz SMD Chip Antennas			
237-A10340	A10340	C	<2	27 x 8 x 3.2mm	Calvus Penta-band SMD Chip Antenna			
237-A10315	A10315	A	2.5	40 x 10 x 3.2mm	Reflexus Penta-band SMD Chip Antenna			

gigaNova® Internal GPS Antennas

Antenova offers high efficiency embedded GPS antennas suitable for handheld & portable device applications.

The new Brevis is a low profile, small footprint, high efficiency embedded GPS antenna for use in all GPS applications where small size and near omni-directional pattern is an advantage.



MOUSER STOCK NO.	Antenova Part No.	Description	Price Each
237-RB-GPS-GP	A10137-R-U1	Reference Board for Co-planar GPS 1575MHz, General Purpose	
237-RB-GPS-D	A10137-D	Reference Board for Co-planar GPS 1575MHz, Dongle	
237-A10204-U1	A10204-U1	Reference Board for Brevis GPS 1575MHz	

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Antenova Part No.	Weight (gram)	Dimensions W1 x W2 x H	Description	Price Each 1	Price Each 10	Price Each 50
237-AN-1-0361-2	A10137	0.7g	20.1 x 9 x 1.6mm	Co-planar GPS 1575 MHz Surface Mount Chip Antenna			
237-A10204	A10204	<0.2g	22 x 3 x 3mm	Brevis GPS 1575 MHz SMD Chip Antenna			

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TEXAS INSTRUMENTS Low Power RF Solutions

RoHS Compliant This page of product is compliant.

Texas Instruments Authorized Distributor

RFID DEVELOPMENT TOOLS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TI Part No.	Description	Tool/Software Type	Typical Read Range (cm)	Frequency (MHz)	.dll or .h Files Included	Price Each
595-RI-K3A-001A-00	RI-K3A-001A-00	Series 2000 LF Micro RFID Evaluation Kit	Starter Kit	15	134.2	No	
595-TRF7960EVM	TRF7960EVM	TRF7960 Evaluation Module	Evaluation	- - -	13.56	No	

TRANSPONDERS

Encapsulated

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	TI Part No	Package	Standard	Frequency (MHz)	Transmission Principle	Programmed Read Only No. (Bits)	Programmable Memory (Bits)	Price Each 1	25	100	250
595-RF-HDT-DVBE-N2	RF-HDT-DVBE-N2	RFIDP	ISO 15693, ISO 18000-3	13.56	ASK, FSK	64	256				
595-RI-TH1-CB1A-00	RI-TH1-CB1A-00	RFIDP	ISO 15693	13.56	- - -	64	2K				

Tag-it HF-I Standard Inlays

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	TI Part No	Package	Standard	Frequency (MHz)	Transmission Principle	Programmed Read Only No. (Bits)	Programmable Memory (Bits)	Price Each 1	25	100	250
595-RI-I03-114A-01	RI-I03-114A-01	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	256				
595-RI-I16-114A-01	RI-I16-114A-01	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	256				
595-RI-I02-114B-01	RI-I02-114B-01	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	256				

Tag-it HF-I Plus Inlays

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	TI Part No	Package	Standard	Frequency (MHz)	Transmission Principle	Programmed Read Only No. (Bits)	Programmable Memory (Bits)	Price Each 1	25	100	250
595-RI-I02-112A-03	RI-I02-112A-03	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	2048				
595-RI-I03-112A-03	RI-I03-112A-03	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	2048				
595-RI-I16-112A-03	RI-I16-112A-03	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	2048				
595-RI-I17-112A-03	RI-I17-112A-03	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	2048				

Tag-it HF-I Pro Inlays

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	TI Part No	Package	Standard	Frequency (MHz)	Transmission Principle	Programmed Read Only No. (Bits)	Programmable Memory (Bits)	Price Each 1	25	100	250
595-RI-I02-114A-S1	RI-I02-114A-S1	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	256				
595-RI-I16-114A-S1	RI-I16-114A-S1	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	256				
595-RI-I17-114A-S1	RI-I17-114A-S1	RFIDN-1	ISO 15693, ISO 18000-3	13.56MHz	ASK, FSK	64	256				

READERS

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	TI Part No	Package	Sub Family	Standard	Frequency (MHz)	Output Power (mW)	Supply Voltage (Vdc)	Current Consumption (mA)	Package Size (mm)	Price Each 1	25	100	250
595-RI-STU-MRD1-30	RI-STU-MRD1-30	- - -	2000	HDX, FSK	0.1342	- - -	5	100	- - -				
595-TRF7960RHBR	TRF7960RHBR	QFN-32	HF Readers	ISO 14443A, ISO 14443B, ISO 15693, ISO 18000-3	13.56	100,200	2.7 to 5.5	10	5.15 x 5.15				
595-TRF7960RHBT	TRF7960RHBT	QFN-32	HF Readers	ISO 14443A, ISO 14443B, ISO 15693, ISO 18000-3	13.56	100, 200	2.7 to 5.5	10	5.15 x 5.15				
595-TRF7961RHBR	TRF7961RHBR	QFN-32	HF Readers	ISO 15693, ISO 18000-3	13.56	100, 200	2.7 to 5.5	10	5.15 x 5.15				
595-TRF7961RHBT	TRF7961RHBT	QFN-32	HF Readers	ISO 15693, ISO 18000-3	13.56	100, 200	2.7 to 5.5	10	5.15 x 5.15				

LF ANTENNAS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	TI Part No	Inductance (uH)	Operating Temp Range (dec C)	Dimensions (mm)	Protection Class	Description	Price Each
595-RI-ANT-G01E-30	RI-ANT-G01E-30	27	-30 to 60	718 x 270 x 47	IP65	Series 2000 Antennas	
595-RI-ANT-G02E-30	RI-ANT-G02E-30	27	-30 to 60	200 x 200 x 25	IP65	Series 2000 Antennas	
595-RI-ANT-G04E-30	RI-ANT-G04E-30	27	-30 to 60	1018 x 518 x 47	IP65	Series 2000 Antennas	
595-RI-ANT-S02C-30	RI-ANT-S02C-30	27	-30 to 70	21 x 140	IP66	Series 2000 Stick Antenna 3m cable	

LF TRANSPONDERS

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	TI Part No	Package	Protection Class	Frequency (kHz)	Transmission Principle	Programmed Read Only No. (Bits)	Programmable Memory (Bits)	Price Each 1	25	100	250
595-RI-TRP-R9QL-30	RI-TRP-R9QL-30	30mm Disk	IP67	134.2	FSK, HDX	64	80				
595-RI-TRP-RE2B-30	RI-TRP-RE2B-30	32mm Glass	Hermetically sealed	134.2	FSK, HDX	64	80				
595-RI-TRP-W4FF-30	RI-TRP-W4FF-30	Card	ISO 7810	134.2	FSK, HDX	64	80				
595-RI-TRP-W9WK-20	RI-TRP-W9WK-20	Wedge	IP68	134.2	FSK, HDX	- - -	80				

LF TRANSPONDER HOLDER

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	TI Part No	Description	Price Each 1	25	100	250	500
595-RI-ACC-T006-00	RI-ACC-T006-00	LF Transponder Housing, Plastic Carrier for 32mm Glass Transponder					
595-RI-ACC-SHT3-00	RI-ACC-SHT3-00	LF Transponder Silicon Sheetings 35mm (100 per unit)					

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TEXAS INSTRUMENTS Wireless Modules

TEXAS INSTRUMENTS
Authorized Distributor

For a complete listing of Texas Instruments Low Power Wireless Development Tools visit www.mouser.com/ti

The CC1020 single chip transceiver and the CC1070 single chip transmitter provide extensive features and great flexibility, which make the chips suitable for a very large number of applications and system requirements. The CC1020 and CC1070 are especially suited for narrowband systems. The CC10x0EM evaluation kit used in combination with a CC1020-C1070DK development kit is primarily designed to make it easy for designers to evaluate transceiver and transmitter performance and in a minimum of time develop their own applications.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC1070EM-433	CC1070EM-433	SUB 1-GHz	
595-CC1070EM-868	CC1070EM-868	SUB 1-GHz	
839-1020EMXK-433	CC1020EMK-433	SUB 1-GHz	
839-1020EMXK-868	CC1020EMK-868	SUB 1-GHz	

- Evaluate the SmartRF®04 products. Right out of the box, the user can do range testing (PER testing) and transfer data from one PC to another using the SmartRF®04DK. This enables the user to quickly find out how well the SmartRF®04 products fit the intended application. A number of demonstration applications serve to highlight the innovative features of the SmartRF®04 ICs.
- Perform RF measurements. Using SmartRF® Studio, the user can configure the radio ICs with parameters that suit the intended application and easily measure sensitivity, output power and other RF parameters.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC1101DK433	CC1101DK433	SUB 1-GHz	
595-CC1101DK868-915	CC1101DK868-915	SUB 1-GHz	
595-CC1101EMK433	CC1101EMK433	SUB 1-GHz	
595-CC1101EMK868-915	CC1101EMK868-915	SUB 1-GHz	
595-CC2510EMK	CC2510EMK	2.4 GHz, SIMPLICITI	
595-CC2511EMK	CC2511EMK	2.4 GHz, SIMPLICITI	
839-1150EM-433	CC1150EMK-433	SUB 1-GHz	
839-1150EM-868	CC1150EMK-868	SUB 1-GHz	
839-2500/50DK	CC2500-CC2550DK	2.4 GHz	
839-2500EMK	CC2500EMK	2.4 GHz	

- Evaluate the CC1110Fx and CC1111Fx. Right out of the box, the user can do range testing (PER testing) between two development boards with or without using a PC. This enables the user to quickly find out how well the CC1110Fx fits the intended application. A number of demonstration applications serve to highlight the innovative features of the SmartRF®04 ICs.
- Perform RF measurements. Using SmartRF® Studio, the user can configure the radio ICs with parameters that suit the intended application and easily measure sensitivity, output power and other RF parameters.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC1110-CC1111DK	CC1110-CC1111DK	SUB 1-GHz	

- Evaluate the SmartRF®04 products. Right out of the box, the user can do range testing (PER testing) and transfer data from one PC to another using the SmartRF®04DK. This enables the user to quickly find out how well the SmartRF®04 products fit the intended application. A number of demonstration applications serve to highlight the innovative features of the SmartRF®04 ICs.
- Perform RF measurements. Using SmartRF® Studio, the user can configure the radio ICs with parameters that suit the intended application and easily measure sensitivity, output power and other RF parameters.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC1110EMK433	CC1110EMK433	SUB 1-GHz	
595-CC1110EMK868-915	CC1110EMK868-915	SUB 1-GHz	

The CC259x RF Front End includes PA, LNA, switches, balun, RF matching network and inductor, and will increase output power and improve receiver sensitivity on a 2.4 GHz low-power RF solution. The CC2430 is an IEEE 802.15.4 compliant System-on-Chip with radio, MCU and Flash.The CC2430-CC259xEMK consists of two CC2430-CC259xEM Evaluation Modules. These modules can be used together with a SmartRF®04 Evaluation Board to evaluate the chip, do RF testing and for prototyping. Also the output power can be increased to around +20dBm, and sensitivity will be improved by up to 6 dB compared with the CC2430 stand alone evaluation module.The CC2430-CC259xEMK should be used together with a SmartRF04EB Evaluation Board, which is included in the CC2430DK Dev Kit.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC2430-CC2590EMK	CC2430-CC2590EMK	2.4GHz	
595-CC2430-CC2591EMK	CC2430-CC2591EMK	2.4GHz	

The CC2431EMK consists of two CC2431 Evaluation Modules. These modules can be used together with a SmartRF®04 Evaluation Board to evaluate the chip, do RF testing and for prototyping. Together with the PC software SmartRF® Studio it is easy to evaluate the chip. From SmartRF® Studio all register on the chip can be accessed and simple packet testing can be done between two boards. This allows for simple range testing between two PCs. It is also possible to use the packets sniffer software with this setup. The pin rows on the SmartRF®04EB can easily be connected to an existing system for prototyping.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC2431EMK	CC2431EMK	2.4GHz, 802.15.4 MAC	

The CC2431ZDK is designed to deliver the most powerful elements for ZigBee™ development with the location engine in the market today. The kit is based on the CC2431 System-on-Chip, which includes the core of the CC2420 transceiver, an 8051 controller, 128 kByte flash memory and lots of useful peripherals. The hardware includes the content of the CC2430ZDK and the CC2431DK. The dedicated CC2431 hardware can easily be used for testing the location engine in ZigBee™ networks. Totally the kit includes 7 CC2430 boards that can be used for reference nodes in a network and 10 CC2431 boards that are able to calculate their own position as well as act as reference nodes.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC2431ZDK	CC2431ZDK	802.15.4 MAC, 2.4GHz, ZIGBEE-Software	

The CC2591 RF Front End includes PA, LNA, switches, balun, RF matching network and inductor, and will increase output power and improve receiver sensitivity on a 2.4 GHz low-power RF solution. The CC2520 is an IEEE 802.15.4 compliant RF transceiver.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC2520-CC2591EMK	CC2520-CC2591EMK	2.4GHz, ZIGBEE-Software	

The CC2520 Development Kit includes hardware and software that allows quick testing of the CC2520 RF performance and offers a complete platform for development of advanced prototype RF systems and for evaluation of the CC2520 right out of the box. The kit can be used for range testing using the pre-programmed PER tester running on the MSP430F2618.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-CC2520DK	CC2520DK	ZIGBEE-Software	

The eZ430-RF2480 Demo Kit* is a complete USB-based MSP430 wireless demonstration tool providing all the hardware and software to evaluate the CC2480 2.4GHz ZigBee network processor and the MSP430F2274 microcontroller. Our demonstration kit has everything needed to understand and fully evaluate the capabilities of CC2480 in a short amount of time with minimal effort.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-EZ430-RF2480	EZ430-RF2480	ZIGBEE-Software	

The eZ430-RF2500 is a complete wireless development tool for the MSP430 and CC2500 that includes all the hardware and software required to develop an entire wireless project with the MSP430 in a convenient USB stick. The tool includes a USB-powered emulator to program and debug your application in-system and two 2.4-GHz wireless target boards featuring the highly integrated MSP430F2274 ultra-low-power MCU.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-EZ430-RF2500	EZ430-RF2500	2.4GHz	

The eZ430-RF2500-SEH is a complete Solar Energy Harvesting development kit to help create a perpetually powered wireless sensor network based on the ultra-low-power MSP430 microcontroller. The Solar Energy Harvester module includes a high-efficiency solar (2.25x2.25") panel optimized for operating indoors under low-intensity fluorescent lights, which provides enough power to run a wireless sensor application with no additional batteries. Inputs are also available for external energy harvesters such as thermal, piezoelectric, or another solar panel.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-EZ430-RF2500-SEH	EZ430-RF2500-SEH	2.4GHz	

The eZ430-RF2500T is an additional wireless target board for the eZ430-RF2500 wireless development tool. The eZ430-RF2500T uses the MSP430F2274 which combines 16-MIPS performance with a 200-ksps 10-bit ADC and 2 op-amps and is paired with the CC2500 2.4 GHz multi-channel RF transceiver designed for low-power wireless applications.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
595-EZ430-RF2500T	EZ430-RF2500T	2.4GHz	

The SmartRF®04DK Development Kit includes a number of functions and applications that allows quick testing of the RF interface and peripherals of the chip. *Evaluate the SmartRF®04 products. Right out of the box, the kit can be used for range testing.

- User SmartRF® Studio to perform RF measurements.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
839-2430DK	CC2430DK	2.4GHz	

The CC2430EMK consists of two CC2430 Evaluation Modules. These modules can be used together with a SmartRF®04 Evaluation Board to evaluate the chip, do RF testing and for prototyping.Together with the PC software SmartRF® Studio it is easy to evaluate the chip. From SmartRF® Studio all register on the chip can be accessed and simple packet testing can be done between two boards. This allows for simple range testing between two PCs. It is also possible to use the packets sniffer software with this setup.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
839-2430EMK	CC2430EMK	802.15.4 MAC, 2.4GHz	

The CC2431DK Development Kit includes a sample application for location calculation and demonstration.

- Evaluate the SmartRF®04 products. Apply power to the boards and the plug and play kit can be used for range testing.
- User SmartRF® Studio to perform RF measurements.
- The radio can be easily configured to measure sensitivity, output power, and other RF parameters.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
839-2431DK	CC2431DK	2.4GHz, 802.15.4 MAC	

CC2430 Demonstration board is based on TI's CC2430, a System-on-Chip solution for IEEE 802.15.4 and ZigBee™ applications. The CC2430DB includes many useful peripherals, e.g. light sensor, LEDs, joystick, potentiometer and accelerometer, which make it useful for prototyping. The CC2430DB can also be used as an In Circuit Emulator and programmer for custom boards. In addition to this it can be used as a packet sniffer together with TI's packet sniffer software to monitor traffic over the air.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
839-CC2430DB	CC2430DB	2.4GHz, 802.15.4 MAC	

The CC2430ZDK is designed to deliver the most powerful elements for ZigBee™ development in the market today. The kit is based on the CC2430 System-on-Chip, which includes the core of the CC2420 transceiver, an 8051 controller, flash memory and lots of useful peripherals. The Sensor Network Analyzer from Daintree is bundled with this development kit. More than a sniffer, the SNA is a comprehensive and powerful solution that takes you from development through to testing, commissioning and maintenance.

MOUSER STOCK NO.	Texas Instruments Part No.	Product Group	Price Each
839-CC2430ZDK	CC2430ZDK	ZIGBEE-Software, 2.4GHz	

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PANASONIC Bluetooth Modules & Mesh Networks

Make Your Product Powered by Panasonic

Modules That Exceed Expectations! Panasonic Electronic Components provides powerful, highly flexible, cost effective RF Modules for a wide variety of wireless Personal Area Network (PAN) applications. New extended range products and small footprints combined with network firmware flexibility make Panasonic an industry leader in the development of cutting edge RF Module technology.

BLUETOOTH RF MODULES

Panasonic's unique Easy-To-Use (ETU) series of modules, plug directly into evaluation kits with the added benefit of header connectors that simplify prototype wiring and field trials. Based on IEEE 802.15.1, Bluetooth was developed for the purpose of sending larger amounts of data quickly from computers to PDAs to cell phones or other portable handheld devices. Key features include high data rate, frequency hopping, very small form factor and modest power consumption.

RoHS Compliant

Series	Receiver Sensitivity (BER=10^{-3})	Output Power	Power Supply	Ultra Low Power Mode	eSCO Link 2-EV3	EDR 3-DH1 / 3-DH5	ACL (connected DH5)	ACL (connected DH1)	Operating Temperature Range
PAN1315	-93 dBm	10.5 dBm typ.	1.7-4.8V	135 uA	8.3 mA	39.2 mA	-	-	-20°C to +70°C
PAN1555	-86 dBm	+4 dBm typ.	2.7-3.6V	<100 uA	-	-	50.5 mA to 49.5 mA	48.0 mA to 46.0 mA	-40°C to +85°C
PAN1455	-86 dBm	+4 dBm typ.	2.7-3.6V	<100 uA	-	-	50.5 mA to 49.5 mA	48.0 mA to 46.0 mA	-40°C to +85°C

PAN1315ETU

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each
667-EVAL-PAN1315	EVAL-PAN1315	Evaluation Kit, Includes TI MSP430 Controller	
667-PAN1315ETU	PAN1315ETU	Development Module, For Use With EVAL-PAN1x15 Evaluation Kit	

NEW SUPPLIER

PAN1315

Panasonic's new PAN1315 Host Controlled Interface (HCI) Bluetooth RF module brings Texas Instrument's seventh generation Bluetooth core integrated circuit, the CC2560, to an easy to use module format. This module has been designed to be 100% pin compatible with the next generation of Bluetooth Low Energy devices. This unique design feature enables designers to seamlessly transition between Bluetooth Classic and Low Energy modules.

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each		
			1	250	500
667-ENW-89818C2JF	ENW-89818C2JF	CC2560 HCI Module, No Antenna			
667-ENW-89818C2KF	ENW-89818C2KF	CC2560 HCI Module, 256K EEPROM Memory, No Antenna			-

NEW SUPPLIER

PAN1555

The new PAN1555 Bluetooth module series is based upon Cambridge Silicon Radio's BlueCore6-ROM (BC06). The PAN1555 includes an integrated ceramic antenna.
The product delivers greater simplicity of use, lower power consumption and enhanced security along with an on-board microcontrollers that optionally include multiple BT profiles, including SPP, HSP, HFP and HDP.

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each		
			1	250	500
667-EVAL-PAN1555	EVAL-PAN1555	EVAL-PAN1555, Evaluation Kit - Stollmann		-	-
667-ENW89815A3KF	ENW89815A3KF	PAN1555, CSR, BC06, SPP Profile, Integrated Antenna			

NEW SUPPLIER

PAN1455

The new PAN1455 Bluetooth module series is also based on Cambridge Silicon Radio's BlueCore6-ROM (BC06). The PAN1455 is excellent for projects requiring an external antenna.
The new PAN1455 Bluetooth module series include on-board microcontrollers that optionally include multiple BT profiles, including SPP, HSP, HFP and HDP.

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each		
			1	250	500
667-EVAL-PAN1455	EVAL-PAN1455	Evaluation Kit for the PAN1455		-	-
667-ENW89815C3KF	ENW89815C3KF	PAN1455, CSR, BC06, SPP Profile			

NEW SUPPLIER

802.15.4 MESH NETWORKS

A wireless mesh network based on the SNAP® (Synapse Network Application Protocol) software stack is instant-on, self-forming, and self-healing. Creating applications to run on the nodes forming the network is fast, efficient, updated over-the-air, and does not require embedded programming skills. In fact, users can administer and manage a SNAP based network without actually having to know anything about the details of wireless networks. This approach makes wireless technology accessible to a much broader range of users, including monitoring and control in consumer, commercial, industrial, and government markets. Uses range from building automation (lighting, security, HVAC) to industrial control and machine communication, medical monitoring, security applications and home automation.

The PAN4561 is a brand new extended range 2.4GHz, ISM, SNAP® software enabled RF module with an industry-leading small footprint size of 35mm x 15mm x 3.5mm!

RoHS Compliant

PAN4561 802.15.4 Extended Range 2.4GHz ISM RF Module

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each		
			1	250	500
667-EVAL-PAN4561	EVAL-PAN4561	Evaluation Kit PAN4561 (Synapse)		-	-
667-ENWC9A30A4EF	ENWC9A30A4EF	Evaluation Module with Ceramic Antenna SNAP FW		-	-
667-ENWC9A21A4EF	ENWC9A21A4EF	802.15.4, Antenna SNAP FW			

NEW SUPPLIER

PAN4555 802.15.4 Short Range Low Power 2.4GHz ISM Band Transceiver

MOUSER STOCK NO.	Panasonic Part No.	Description	Price Each		
			1	250	500
667-EVAL-PAN4555	EVAL-PAN4555	802.15.4, EVAl-PAN4555, Evaluation Kit PAN4555 (Synapse)		-	-
667-EVAL-PAN4555ETU	EVAL-PAN4555ETU	802.15.4, EVAL-PAN4555ETU, PAN4555 Evaluation Module			
667-ENWC9A08A4EF	ENWC9A08A4EF	802.15.4, 8 bit Ceramic Antenna, SNAP FW			
667-ENW89818C2KF	ENW89818C2KF	BL6450 HCI Module - No Antenna, No EEPROM			-
667-ENW89818C2JF	ENW89818C2JF	BL6450 HCI Module - No Antenna, 256K EEPROM			

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LS RESEARCH Wireless Modules and Dev Kits

LS RESEARCH
Wireless Product Development

	Si-FLEX LS900-SI-02	Pro-FLEX LS240-ZP-01	Ti-Wi LS240-WI-01
Frequency	900 MHz	2.4 GHz	2.4 GHz
Standard	IEEE 802.15.4 / ZigBee	IEEE 802.15.4 / ZigBee	802.11b/g/n, Bluetooth
Processor	Atmel Atxmeg a128A3	TI MSP430F5437	N/A
Operating Current	205mA (Tx mode) 30mA (Rx mode)	145mA (Tx mode) 30mA (Rx mode)	300mA (Tx mode) 110mA (Rx mode)
Data Rate	UP to 1 MBps	250 KBps	Per Standard
Operating Voltage	2.0 V – 3.45 V	2.0 V – 3.3 V	2.7 V – 3.6 V
Output Power	24 dBm	20 dBm	WLAN 16 dBm, BT12 dBm
Receiver Sensitivity	-102 dBm	-98 dBm	WLAN -75 dBm, BT -88 dBm
Memory	256K Flash 16K RAM 4K EEPROM	256K Flash 16K RAM	N/A
Integrated Antenna	•	•	
External Antenna Support	•	•	•
Host Interface	UART	UART	UART
AES Encryption	•	•	•

PRO-FLEX

The Pro-FLEX module is a high performance 2.4GHz IEEE 802.15.4 radio (CC2520 & CC2591) and microcontroller (MSP430F5437) in a cost effective, pre-certified footprint. The module comes preloaded with the TI MAC-Stack that can be used with the LSR host serial interface.

Full debug and programming capabilities are included to develop custom applications. Easily load the TI ZigBee stack or MAC onto the module and create your own network.

Features:
- 100mW 2.4 GHz Zigbee / 802.15.4 Transceiver
- Supports Zigbee Pro and Smart Energy Profile
- Very Versatile, Ultra Low Power Microcontroller Platform
- Integrated PCB F antenna or U.FL connector for external antenna

Specifications:
- MSP430F5437 Microcontroller
- 100mW RF Output Power
- RF Sensitivity up to -99 dBm
- 2.2V to 3.3V Operation
- 256K Flash / 16K RAM
- Power Consumption:
  - 145mA in Transmit
  - 30mA in Receive

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each 1	50	100	1000
741-LS240-ZP-01-A10	LS240-ZP-01-A10	Pro-FLEX Module with Inverted-F Antenna				
741-LS240-ZP-01-A20	LS240-ZP-01-A20	Pro-FLEX Module with U.FL Connector				
741-LSDEV-ZP01-A10	LSDEV-ZP01-A10	Pro-FLEX Development Kit		-	-	-

SI-FLEX

The SiFLEX module is a high performance 900MHz IEEE 802.15.4 radio (AT86RF212 & RF amplifier circuit) and microcontroller (ATXMEGA256A3) in a cost effective, pre-certified footprint.

Full debug and programming capabilities are included to develop custom applications. Easily load the ZigBee or MAC stack onto the module and create your own network.

Features:
- 900 MHz DSSS Transceiver
- Si-Flex Star Network Protocol – fast, simple, ultra reliable wireless protocol
- Data Rate up 1 Mbps
- Low Latency
- AES Encryption for Secure Network
- FCC/IC Certified (pending)

Specifications:
- Atmel AT86RF212 900 MHz Direct Sequence Spread Spectrum Transceiver
- ATxmega128A3 Processor
- 250mW RF Output Power
- RF Sensitivity up to -102 dBm
- 2.0V to 3.45V Operation
- 256K Flash / 16K RAM / 4K EEPROM
- Power Consumption:
  - 205mA in Transmit
  - 30mA in Receive

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each 1	50	100	1000
741-LS900-SI-02-A30	LS900-SI-02-A30	Si-FLEX with Wire Antenna				
741-LS900-SI-02-A20	LS900-SI-02-A20	Si-FLEX with U.FL Connector				
741-LSDEV-SI02-A30	LSDEV-SI02-A30	Si-FLEX Development Kit		-	-	-

TI-WI

The TiWi LS240-WI-01 is a multi standard module with support for 802.11b/g/n, Bluetooth, FM Broadcast Receiver, and FM Transmitter.

NEW PRODUCT

Features:
- Low Cost Embedded 802.11 b/g/n , Bluetooth, FM Module
- Compact Module with U.FL Connector with Approved Antennas
- WLAN Features include:
  - Output Power 16 dBm, 802.11g 54Mbps, EVM <3.5%
  - RF Sensitivity up to -75dBm
- Bluetooth Features include:
  - Bluetooth 1.1, 1.2, 2.0+EDR and 2.1+EDR specification compliant up to HCI level
  - Output Power 12dBm, Class 1.5
  - RF Sensitvity up to -88dBm, GFSK, BER=0.1%

Specifications:
- SPI/SDIO Interface to OMAP processor
- Hardware-Based Encryption/Decryption Using 64-, 128-, and 256-Bit WEP, TKIP or AES Keys,
- Operating Voltage: 2.7V to 3.6V
- FCC/IC Certified (pending)
- Integral TXCOs, Fast and Slow Clocks
- Power Consumption- 300mA max in Transmit, 110mA max in Receive

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	LS Research Part No.	Description	Price Each 1	50	100	1000
741-LS240-WI-01-A20	LS240-WI-01-A20	Multi-Standard Module with U.FL Connector				
741-LSDEV-WI01-A20	LSDEV-WI01-A20	TiWi RF Development Kit		-	-	-

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RFM Short Range Radios and RFICs

The RFM brand of Subsystem RF products consists of SAW-based Short-Range Radios and RFIC Short-Range Radios. These RF devices include second (2G) and third (3G) generation hybrid transmitter, receiver and transceiver radios based on RFM proprietary Virtual WireTM Technology.

VIRTUAL WIRE RADIO

RFM SAW-based Short-Range Radios are based on RFM Virtual Wire Technology that features ultra-low-power, proprietary amplifier-sequenced hybrid (ASH) radio architecture and offer the following features:

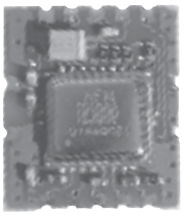
Features:

- Integrated RF IC with quartz SAW filtering and frequency control components in a single hybrid
- High Data rates for data, control and digitized voice transmissions
- Stable, sensitive receiver technology with excellent "channel capture" performance
- Ultra Low current consumption for operation from small 3V batteries
- Very small, low-profile package to make "watch size" applications practical
- Rugged, self-shielding, metal-ceramic hybrid package
- Wide operating temperature range for industrial and outdoor applications
- Easy to optimize for a wide range of application requirements
- Easy certification to stringent short-range radio regulatory requirements
- No external RF filters, IF filters, resonators or crystals are required

RF Modules

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	RFM Part No.	Description	Power Output	Operating Voltage	Operating Temperature	Price Each 1	100	250
719-DR3000	DR3000	Transceiver Module 916.500MHZ	.75mW	2.7Vdc - 3.5Vdc	-40°C to +85°C			
719-DR3100	DR3100	Transceiver Module 433.920MHz	1.2mW	2.7Vdc - 3.5Vdc	-40°C to +85°C			
719-DR3101	DR3101	Transceiver Module 315.00MHz	1mW	2.7 - 3.5Vdc	-40°C to +85°C			
719-DR3300	DR3300	Transceiver Module 916.50MHz	1mW	2.7 - 3.5Vdc	-40°C to +85°C			
719-DR5000	DR5000	Receiver Module 916.50MHz	--	2.7Vdc - 3.5Vdc	-20°C to +65°C			
719-DR5100	DR5100	Receiver Module 433.92MHz	1mW	2.7 - 3.5Vdc	-20°C to +65°C			



RF Modules

Transceivers

RFM's amplifier-sequenced hybrid (ASH) transceiver is specifically designed for short-range wireless data communication applications. The transceiver provides robust operation, very small size, low power consumption and low implementation cost. All critical RF functions are contained in the hybrid, simplifying and speeding design-in. The ASH transceiver can be readily configured to support a wide range of data rates and protocol requirements. The transceiver features excellent suppression of transmitter harmonics and virtually no RF emissions when receiving, making it easy to certify to short- range (unlicensed) radio regulations.

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	RFM Part No.	Description	Case	Frequency (MHz)	Operating Temperature	Price Each 1	100	250
719-TR1000	TR1000	ASH Transceiver Module 115.2kbps	SM-20H	916.5	-40°C to +85°C			
719-TR1001	TR1001	ASH Transceiver Module 115.2kbps	SM-20H	868.35	-40°C to +85°C			
719-TR1100	TR1100	ASH Transceiver Module 115.2kbps	SM-20H	916.5	-40°C to +85°C			
719-TR3000	TR3000	ASH Transceiver Module 115.2kbps	SM-20L	433.92	-40°C to +85°C			
719-TR3001	TR3001	ASH Transceiver Module 115.2kbps	SM-20L	315	-40°C to +85°C			
719-TR3005	TR3005	ASH Transceiver Module 115.2kbps	SM-20H	403.5	-10°C to +55°C			
719-TR7000	TR7000	ASH Transceiver Module 115.2kbps	SM3-20H	433.92	-40°C to +85°C			
719-TR8000	TR8000	ASH Transceiver Module 115.2kbps	SM3-20H	916.5	-40°C to +85°C			
719-TR8100	TR8100	ASH Transceiver Module 115.2kbps	SM3-20H	916.5	-40°C to +85°C			

Transceivers

Receivers

RFM's amplifier-sequenced hybrid (ASH) receivers are specifically designed for short-range wireless control and data communication applications. The receivers provide robust operation, very small size, low power consumption and low implementation cost. All critical RF functions are contained in the hybrid, simplifying and speeding design-in. The ASH receiver can be readily configured to support a wide range of data rates and protocol requirements. The receiver features virtually no RF emissions, making it easy to certify to short-range (unlicensed) radio regulations.

For quantities of 500 and up, call for quote.

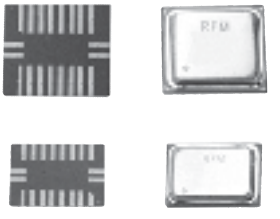
719-RX5000	RX5000	ASH Receiver Module 115.2kbps	SM-20L	433.92	-40°C to +85°C			
719-RX5002	RX5002	ASH Receiver Module 115.2kbps	SM-20L	418	-40°C to +85°C			
719-RX5003	RX5003	ASH Receiver Module 115.2kbps	SM-20L	303.825	-40°C to +85°C			
719-RX5500	RX5500	ASH Receiver Module 19.2kbps	SM-20L	433.92	-40°C to +85°C			
719-RX5501	RX5501	ASH Receiver Module 19.2kbps	SM-20L	315	-40°C to +85°C			
719-RX6000	RX6000	ASH Receiver Module 115.2kbps	SM3-20H	916.5	-40°C to +85°C			
719-RX6001	RX6001	ASH Receiver Module 115.2kbps	SM-20H	868.35	-40°C to +85°C			

Transmitters

RFM's TX-series hybrid transmitters are specifically designed for short range wireless data communication applications. These transmitters provide robust operation, very small size, low power consumption and low implementation cost. All critical RF functions are contained in the hybrid, simplifying and speeding design-in. The transmitters can be readily configured to support a wide range of data rates and protocol requirements. TX-series transmitters feature excellent suppression of output harmonics and virtually no other RF emissions, making them easy to certify to short range (unlicensed) radio regulations.

For quantities of 500 and up, call for quote.

719-TX5000	TX5000	ASH Transceiver Module 115.2kbps	SM-20L	433.92	-40°C to +85°C			
719-TX6000	TX6000	ASH Transceiver Module 115.2kbps	SM-20H	916.5	-40°C to +85°C			



Receivers and Transmitters

Development Kits

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	RFM Part No.	Description	Frequency (MHz)	Price Each
719-DR1200-DK	DR1200-DK	2G Development Kit	916.5MHz	
719-DR2000-DK	DR2000-DK	2G Development Kit	916.5MHz	
719-DR7000-DK	DR7000-DK	3G Development Kit	433.92MHz	
719-DR7001-DK	DR7001-DK	3G Development Kit	315MHz	
719-DR7003-DK	DR7003-DK	3G Development Kit	303.828MHz	
719-DR8000-DK	DR8000-DK	3G Development Kit	916.5MHz	
719-DR8001-DK	DR8001-DK	3G Development Kit	868.35MHz	
719-DR8100-DK	DR8100-DK	3G Development Kit	916.5MHz	

RFICS

RFM's RFIC Products include PLL based, single or multi-channel Transceiver, Transmitter and Receiver products, Evaluation boards and RF Design Assistant Software, servicing varied wireless applications in the market place and offer the following features:

Features:

- Integrated PLL, IF, Baseband Circuitry, thus minimizing external component count and simplifying and speeding design-ins
- Support for Multiple Channels
- Wide Frequency range
- Wide operating supply voltage
- Frequency Hopping Spread Spectrum capability
- Low current consumption
- Very few external components required
- Small size plastic packages

PRODUCT NEW

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	RFM Part No.	Description	Frequency	Case	Price Each 1	10	50	100
Transceivers								
719-TRC104	TRC104	Multi-channel GFSK RFIC Transceiver	2.4GHz	24-pin QFN				
719-TRC105	TRC105	Multi-channel FSK RFIC Transceiver	300-510 MHz	32-pin QFN-32				

Development Kits

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	RFM Part No.	Description	Frequency	Price Each
719-DR-TRC103-868-DK	DR-TRC103-868-DK	TRC103 Development Kit	863-870MHz	
719-DR-TRC103-915-DK	DR-TRC103-915-DK	TRC103 Development Kit	902-928MHz	
719-DR-TRC104-2400DK	DR-TRC104-2400-DK	TRC104 Development Kit	2.4GHz	
719-DR-TRC105-304-DK	DR-TRC105-304-DK	TRC105 Development Kit	303.325-307.300 MHz	
719-DR-TRC105-315-DK	DR-TRC105-315-DK	TRC105 Development Kit	310.000-319.500 MHz	
719-DR-TRC105-403-DK	DR-TRC105-403-DK	TRC105 Development Kit	402.000-407.300 MHz	
719-DR-TRC105-434-DK	DR-TRC105-434-DK	TRC105 Development Kit	418.000-434.790 MHz	

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LINX TECHNOLOGIES RF Modules and Dev Systems

Products may be RoHS compliant. Check mouser.com for RoHS status.

Linx RF modules make it easy and cost-effective to add wireless capabilities to your product. Linx modules contain all the components necessary for the transmission of RF. Since no external components (except an antenna) are needed, the modules are easily applied, even by persons without previous RF design experience. This conserves valuable engineering resources and greatly reduces the product's time to market.

EMBEDDED GPS MODULES

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. / Mfr. Mfr. Part No.	Fig.	Description	Frequency (MHz)	Vcc (V)	Icc (mA) Typ.	Analog Range	Max Data Range (bps)	Pkg.	Price Each 1	25	50
712—RXM-GPS-SG-B	A	SG Series GPS Receiver Module - Bulk	1575.42	3.0-4.2	46\28	-	-	SMD			
712—RXM-GPS-SR-B	B	SR Series GPS Receiver w/Integrated Antenna - Bulk	1575.42	3.0-4.2	46\28	-	-	SMD			
GPS Development and Evaluation Systems									**1**		
712—MDEV-GPS-SG		SG Master Development System									
712—MDEV-GPS-SR		SR Master Development System									

LT SERIES - LONG RANGE RF TRANSCEIVER MODULES

For quantities of 100 and up, call for quote.

712—TRM-315-LT	C	RF Transceiver Module	315	2.1-3.6	9.5/7.9	-	10,000	SMD			
712—TRM-418-LT	C	RF Transceiver Module	418	2.1-3.6	9.5/7.9	-	10,000	SMD			
712—TRM-433-LT	C	RF Transceiver Module	433.92	2.1-3.6	9.5/7.9	-	10,000	SMD			
LT Series Development and Evaluation Systems									**1**		
712—EVAL-315-LT		LT Series Basic Evaluation Kit 315MHz									
712—EVAL-418-LT		LT Series Basic Evaluation Kit 418MHz									
712—EVAL-433-LT		LT Series Basic Evaluation Kit 433MHz									

LR SERIES - LONG RANGE WIRELESS COMMUNICATION MODULES

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. / Mfr. Mfr. Part No.	Fig.	Description	Frequency (MHz)	Vcc (V)	Icc (mA) Typ.	Analog Range	Max Data Range (bps)	Pkg.	Price Each 1	25	50
712—TXM-315-LR	D	RF Transmitter Module	315	2.1-3.6	3.4	-	10,000	SMD			
712—TXM-418-LR	D	RF Transmitter Module	418	2.1-3.6	3.4	-	10,000	SMD			
712—TXM-433-LR	D	RF Transmitter Module	433.92	2.1-3.6	3.4	-	10,000	SMD			
712—RXM-315-LR	E	RF Receiver Module	315	2.7-3.6	5.2	50Hz-5kHz	10,000	SMD			
712—RXM-418-LR	E	RF Receiver Module	418	2.7-3.6	5.2	50Hz-5kHz	10,000	SMD			
712—RXM-433-LR	E	RF Receiver Module	433.92	2.7-3.6	5.2	50Hz-5kHz	10,000	SMD			
LR Series Development and Evaluation Systems									**1**		
712—EVAL-315-LR		LR Series Basic Evaluation Kit 315MHz									
712—EVAL-418-LR		LR Series Basic Evaluation Kit 418MHz									
712—EVAL-433-LR		LR Series Basic Evaluation Kit 433MHz									

LC SERIES - LOW COST RF TRANSMITTER MODULES

For quantities of 100 and up, call for quote.

712—TXM-315-LC	F	RF Transmitter Module	315	2.7-5.2	3.0	-	5,000	SMD			
712—TXM-418-LC	F	RF Transmitter Module	418	2.7-5.2	3.0	-	5,000	SMD			
712—TXM-433-LC	F	RF Transmitter Module	433.92	2.7-5.2	3.0	-	5,000	SMD			
LC Series Development and Evaluation Systems									**1**		
712—EVAL-315-LC		LC Series Basic Evaluation Kit 315MHz									
712—EVAL-418-LC		LC Series Basic Evaluation Kit 418MHz									
712—EVAL-433-LC		LC Series Basic Evaluation Kit 433MHz									

KH2 SERIES - RF TRANSMITTERS & RECEIVERS WITH INTEGRATED ENCODER & DECODER CHIPS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. / Mfr. Mfr. Part No.	Fig.	Description	Frequency (MHz)	Vcc (V)	Icc (mA) Typ.	Analog Range	Max Data Range (bps)	Pkg.	Price Each 1	25	50
712—TXE-315-KH2	G	RF Transmitter / Encoder Module	315	2.7-5.2	1.5	-	5,000	SMD			
712—TXE-418-KH2	G	RF Transmitter / Encoder Module	418	2.7-5.2	1.5	-	5,000	SMD			
712—TXE-433-KH2	G	RF Transmitter / Encoder Module	433.92	2.7-5.2	1.5	-	5,000	SMD			
712—RXD-315-KH2	H	RF Receiver / Decoder Module	315	2.7-3.6	5.2	50Hz-5kHz	10,000	SMD			
712—RXD-418-KH2	H	RF Receiver / Decoder Module	418	2.7-3.6	5.2	50Hz-5kHz	10,000	SMD			
712—RXD-433-KH2	H	RF Receiver / Decoder Module	433.92	2.7-3.6	5.2	50Hz-5kHz	10,000	SMD			
KH2 Series Development and Evaluation Systems									**1**		
712—EVAL-315-KH2		KH2 Series Basic Evaluation Kit 315MHz									
712—EVAL-418-KH2		KH2 Series Basic Evaluation Kit 418MHz									
712—EVAL-433-KH2		KH2 Series Basic Evaluation Kit 433MHz									

ES SERIES - DIGITAL AND ANALOG WIRELESS MODULES

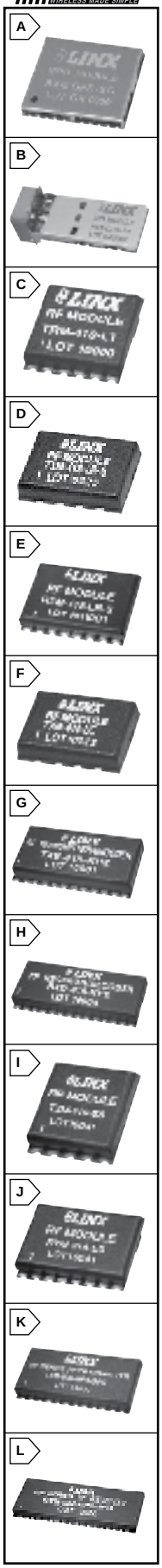
For quantities of 100 and up, call for quote.

712—TXM-869-ES	I	RF Transmitter Module	869.85	2.1-4.0	7.0	20Hz-28kHz	56,000	SMD			
712—TXM-916-ES	I	RF Transmitter Module	916.48	2.1-4.0	7.0	20Hz-28kHz	56,000	SMD			
712—RXM-869-ES	J	RF Receiver Module	869.85	4.5-5.5	6.0	20Hz-28kHz	56,000	SMD			
712—RXM-916-ES	J	RF Receiver Module	916.48	4.5-5.5	6.0	20Hz-28kHz	56,000	SMD			
ES Series Development and Evaluation Systems									**1**		
712—EVAL-869-ES		ES Series Basic Evaluation Kit 869MHz									
712—EVAL-916-ES		ES Series Basic Evaluation Kit 916MHz									
712—MDEV-869-ESRS232		ES Series - Master Development System 869MHz, RS232 Module									
712—MDEV-869-ES-USB		ES Series - Master Development System 869MHz, USB Module									
712—MDEV-916-ESRS232		ES Series Master Development System 916MHz, RS232 Module									
712—MDEV-916-ES-USB		ES Series Master Development System 916MHz, USB Module									

HP3 SERIES - MULTI-CHANNEL RADIO FREQUENCY MODULES

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. / Mfr. Mfr. Part No.	Fig.	Description	Frequency (MHz)	Vcc (V)	Icc (mA) Typ.	Analog Range	Max Data Range (bps)	Pkg.	Price Each 1	25	50
712—TXM-900-HP3-PPO	K	RF Transmitter Module - 8 Parallel Channels	902-928	2.8-13.0	14.0	50Hz-28kHz	56,000	SIP			
712—TXM-900-HP3-PPS	K	RF Transmitter Module - 8 Parallel/100 Serial Channels	902-928	2.8-13.0	14.0	50Hz-28kHz	56,000	SIP			
712—TXM-900-HP3-SPO	K	RF Transmitter Module - 8 Parallel Channels	902-928	2.8-13.0	14.0	50Hz-28kHz	56,000	SMD			
712—TXM-900-HP3-SPS	K	RF Transmitter Module - 8 Parallel/100 Serial Channels	902-928	2.8-13.0	14.0	50Hz-28kHz	56,000	SMD			
712—RXM-900-HP3-PPO	L	RF Receiver Module - 8 Parallel Channels	902-928	2.8-13.0	19.0	50Hz-28kHz	56,000	SIP			
712—RXM-900-HP3-PPS	L	RF Receiver Module - 8 Parallel/100 Serial Channels	902-928	2.8-13.0	19.0	50Hz-28kHz	56,000	SIP			
712—RXM-900-HP3-SPO	L	RF Receiver Module - 8 Parallel Channels	902-928	2.8-13.0	19.0	50Hz-28kHz	56,000	SMD			
712—RXM-900-HP3-SPS	L	RF Receiver Module - 8 Parallel/100 Serial Channels	902-928	2.8-13.0	19.0	50Hz-28kHz	56,000	SMD			
HP3 Series Development and Evaluation Systems									**1**		
712—MDV900HP3PPSRS23		HP-3 Master Development System Pinned, RS232 Module									
712—MDEV900HP3PPSUSB		HP-3 Master Development System Pinned, USB Module									
712—MDV900HP3SPSRS23		HP-3 Master Development System SMD, RS232 Module									
712—MDEV900HP3SPSUSB		HP-3 Master Development System SMD, USB Module									



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ANTENNA FACTOR Evaluation Systems and Antennas

EVALUATION SYSTEMS

For quantities of 25 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Frequency (MHz)	Price Each
712	PAEK-418	Permanent-Mount Antenna Evaluation Kit	418	
712	PAEK-433	Permanent-Mount Antenna Evaluation Kit	433	
712	PAEK-868	Permanent-Mount Antenna Evaluation Kit	868	
712	PAEK-916	Permanent-Mount Antenna Evaluation Kit	916	
712	CAEK-418	Connectorized Antenna Evaluation Kit	418	
712	CAEK-433	Connectorized Antenna Evaluation Kit	433	
712	CAEK-868	Connectorized Antenna Evaluation Kit	868	
712	CAEK-916	Connectorized Antenna Evaluation Kit	916	
712	AEK-868-CHP	Chip Antenna Evaluation Kit	868	
712	AEK-916-CHP	Chip Antenna Evaluation Kit	916	
712	AEK-2.45-CHP	Chip Antenna Evaluation Kit	2.45 GHz	

PERMANENT-MOUNT ANTENNAS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig.	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-315-PW-LP	A	LP Series - Reduced Height 1/4 Wave Whip Monopole	Screw Mount	315			
712	ANT-418-PW-LP	A	LP Series - Reduced Height 1/4 Wave Whip Monopole	Screw Mount	418			
712	ANT-433-PW-LP	A	LP Series - Reduced Height 1/4 Wave Whip Monopole	Screw Mount	433			
712	ANT-868-PW-LP	A	LP Series - Reduced Height 1/4 Wave Whip Monopole	Screw Mount	868			
712	ANT-916-PW-LP	A	LP Series - Reduced Height 1/4 Wave Whip Monopole	Screw Mount	916			
712	ANT-2.4-PW-LP	A	LP Series - Reduced Height 1/4 Wave Whip Monopole	Screw Mount	2.4 GHz			
712	ANT-315-PW-RA	A	RA Series - Swivel Angle 1/4 Wave Whip Monopole	Screw Mount	315			
712	ANT-418-PW-RA	A	RA Series - Swivel Angle 1/4 Wave Whip Monopole	Screw Mount	418			
712	ANT-433-PW-RA	A	RA Series - Swivel Angle 1/4 Wave Whip Monopole	Screw Mount	433			
712	ANT-868-PW-RA	A	RA Series - Swivel Angle 1/4 Wave Whip Monopole	Screw Mount	868			
712	ANT-916-PW-RA	A	RA Series - Swivel Angle 1/4 Wave Whip Monopole	Screw Mount	916			
712	ANT-418-PW-QW	A	PW Series - 1/4 Wave Whip Monopole	- -	418			
712	ANT-433-PW-QW	A	PW Series - 1/4 Wave Whip Monopole	- -	433			
712	ANT-868-PW-QW	A	PW Series - 1/4 Wave Whip Monopole	- -	868			
712	ANT-916-PW-QW	A	PW Series - 1/4 Wave Whip Monopole	- -	916			
712	ANT-2.4-PW-QW	A	PW Series - 1/2 Wave Whip Dipole	- -	2.4 GHz			
712	ANT-868-PML	A	PML Series - Right Angle Swivel 1/2 Wave Whip Dipole	- -	868			
712	ANT-916-PML	A	PML Series - Right Angle Swivel 1/2 Wave Whip Dipole	- -	916			

CONNECTORIZED ANTENNAS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig.	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-418-CW-QW	B	CW Series- 1/4 Wave Whip Monopole	RP-SMA	418			
712	ANT-433-CW-QW	B	CW Series - 1/4 Wave Whip Monopole	RP-SMA	433			
712	ANT-868-CW-QW	B	CW Series - 1/4 Wave Whip Monopole	RP-SMA	868			
712	ANT-916-CW-QW	B	CW Series - 1/4 Wave Whip Monopole	RP-SMA	916			
712	ANT-916-CW-QWSMA	B	CW Series - 1/4 Wave Whip Monopole	SMA	916			
712	ANT-2.4-CW-QWRPS	B	CW Series - 1/2 Wave Whip Dipole	RP-SMA	2.4 GHz			
712	ANT-2.4-CW-QWSMA	B	CW Series - 1/2 Wave Whip Dipole	SMA	2.4 GHz			
712	ANT-315-CW-RH	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	RP-SMA	315			
712	ANT-315-CW-RHSMA	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	SMA	315			
712	ANT-418-CW-RH	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	RP-SMA	418			
712	ANT-418-CW-RHSMA	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	SMA	418			
712	ANT-433-CW-RH	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	RP-SMA	433			
712	ANT-433-CW-RHSMA	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	SMA	433			
712	ANT-868-CW-RH	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	RP-SMA	868			
712	ANT-868-CW-RHSMA	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	SMA	868			
712	ANT-916-CW-RH	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	RP-SMA	916			
712	ANT-916-CW-RHSMA	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	SMA	916			
712	ANT-2.4-CW-RH	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	RP-SMA	2.45 GHz			
712	ANT-2.4-CW-RHSMA	B	RH Series - Reduced Height 1/4 Wave Whip Monopole	SMA	2.45 GHz			
712	ANT-315-CW-HD	B	HD Series - Heavy Duty 1/4 Wave Whip Monopole	RP-SMA	315			
712	ANT-418-CW-HD	B	HD Series - Heavy Duty 1/4 Wave Whip Monopole	RP-SMA	418			
712	ANT-433-CW-HD	B	HD Series - Heavy Duty 1/4 Wave Whip Monopole	RP-SMA	433			
712	ANT-868-CW-HD	B	HD Series - Heavy Duty 1/4 Wave Whip Monopole	RP-SMA	868			
712	ANT-916-CW-HD	B	HD Series - Heavy Duty 1/4 Wave Whip Monopole	RP-SMA	916			
712	ANT-315-CW-HW	B	HW Series - 1/4 Wave Whip Monopole	RP-SMA	315			
712	ANT-418-CW-HW	B	HW Series - 1/4 Wave Whip Monopole	RP-SMA	418			
712	ANT-433-CW-HW	B	HW Series - 1/4 Wave Whip Monopole	RP-SMA	433			
712	ANT-868-CW-HW	B	HW Series - 1/2 Wave Whip Dipole	RP-SMA	868			
712	ANT-916-CW-HW	B	HW Series - 1/2 Wave Whip Dipole	RP-SMA	916			
712	ANT-2.4-CW-CTRPS	B	CT Series - Straight 1/2 Wave Whip Dipole	RP-SMA	2.45 GHz			
712	ANT-2.4-CW-CTSMA	B	CT Series - Straight 1/2 Wave Whip Dipole	SMA	2.45 GHz			
712	ANT-315-CWHWRRPS	B	HWR Series - Tilt Swivel 1/4 Wave Whip Monopole	RP-SMA	315			
712	ANT-315-CWHWRSMA	B	HWR Series - Tilt Swivel 1/4 Wave Whip Monopole	SMA	315			
712	ANT-418-CWHWRRPS	B	HWR Series - Tilt Swivel 1/4 Wave Whip Monopole	RP-SMA	418			
712	ANT-418-CWHWRSMA	B	HWR Series - Tilt Swivel 1/4 Wave Whip Monopole	SMA	418			
712	ANT-433-CWHWRRPS	B	HWR Series - Tilt Swivel 1/4 Wave Whip Monopole	RP-SMA	433			
712	ANT-433-CWHWRSMA	B	HWR Series - Tilt Swivel 1/4 Wave Whip Monopole	SMA	433			
712	ANT-868-CWHWRRPS	B	HWR Series - Tilt Swivel 1/2 Wave Whip Dipole	RP-SMA	868			
712	ANT-868-CWHWRSMA	B	HWR Series - Tilt Swivel 1/2 Wave Whip Dipole	SMA	868			
712	ANT-916-CWHWRRPS	B	HWR Series - Tilt Swivel 1/2 Wave Whip Dipole	RP-SMA	916			
712	ANT-916-CWHWRSMA	B	HWR Series - Tilt Swivel 1/2 Wave Whip Dipole	SMA	916			
712	ANT-1.4-CWHWRRPS	B	HWR Series - Tilt Swivel 1/2 Wave Whip Dipole	RP-SMA	1.4 GHz			
712	ANT-1.4-CWHWRSMA	B	HWR Series - Tilt Swivel 1/2 Wave Whip Dipole	SMA	1.4 GHz			
712	ANT-2.4-CW-RCTRP	B	RCT Series - Right Angle Multi-Position 1/2 Wave Whip Dipole	RP-SMA	2.45 GHz			
712	ANT-2.4-CW-RCTSS	B	RCT Series - Right Angle Multi-Position 1/2 Wave Whip Dipole	SMA	2.45 GHz			
712	ANT-315-CW-RCS	B	RCS Series - Reduced Height Right Angle 1/4 Wave Whip Monopole	RP-SMA	315			
712	ANT-418-CW-RCS	B	RCS Series - Reduced Height Right Angle 1/4 Wave Whip Monopole	RP-SMA	418			
712	ANT-433-CW-RCS	B	RCS Series - Reduced Height Right Angle 1/4 Wave Whip Monopole	RP-SMA	433			
712	ANT-868-CW-RCS	B	RCS Series - Reduced Height Right Angle 1/4 Wave Whip Monopole	RP-SMA	868			
712	ANT-916-CW-RCS	B	RCS Series - Reduced Height Right Angle 1/4 Wave Whip Monopole	RP-SMA	916			
712	ANT-2.4-CW-RCS	B	RCS Series - Reduced Height Right Angle 1/4 Wave Whip Monopole	RP-SMA	2.45 GHz			
712	ANT-2.4-CWRCSSMA	B	RCS Series - Reduced Height Right Angle 1/4 Wave Whip Monopole	SMA	2.45 GHz			
712	ANT-916-CW-RCL	B	RCL Series - Right Angle Multi-Position 1/4 Wave Whip Monopole	RP-SMA	916			
712	ANT-2.4-CW-RCL	B	RCL Series - Right Angle Multi-Position 1/2 Wave Whip Dipole	RP-SMA	2.45 GHz			
712	ANT-315-CW-RAH	B	RAH Series -Reduced Height Right-Angle 1/4 Wave Whip Monopole	RP-SMA	315			
712	ANT-418-CW-RAH	B	RAH Series -Reduced Height Right-Angle 1/4 Wave Whip Monopole	RP-SMA	418			
712	ANT-433-CW-RAH	B	RAH Series -Reduced Height Right-Angle 1/4 Wave Whip Monopole	RP-SMA	433			
712	ANT-868-CW-RAH	B	RAH Series -Reduced Height Right-Angle 1/4 Wave Whip Monopole	RP-SMA	868			
712	ANT-916-CW-RAH	B	RAH Series -Reduced Height Right-Angle 1/4 Wave Whip Monopole	RP-SMA	916			
712	ANT-2.4-CW-RAH	B	RAH Series -Reduced Height Right-Angle 1/4 Wave Whip Monopole	RP-SMA	2.45 GHz			
712	ANT-2.4-CWRAHSMA	B	RAH Series -Reduced Height Right-Angle 1/4 Wave Whip Monopole	SMA	2.45 GHz			
712	ANT-DB1-RAF	B	RAF Series - Dual Band Tilt Swivel 1/2 Wave Dipole	RP-SMA	2.45/5.8GHz			
712	ANT-DB1-RAF-SMA	B	RAF Series - Dual Band Tilt Swivel 1/2 Wave Dipole	SMA	2.45/5.8GHz			

A

B

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ANTENNA FACTOR Antennas

EMBEDDED ANTENNAS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-315-SP	A	SP Series "The Splatch"- SMD Grounded Line 1/4-wave Monopole	Solder	315			
712	ANT-403-SP	A	SP Series "The Splatch"- SMD Grounded Line 1/4-wave Monopole	Solder	403			
712	ANT-418-SP	A	SP Series "The Splatch"- SMD Grounded Line 1/4-wave Monopole	Solder	418			
712	ANT-433-SP	A	SP Series "The Splatch"- SMD Grounded Line 1/4-wave Monopole	Solder	433			
712	ANT-458-SP	A	SP Series "The Splatch"- SMD Grounded Line 1/4-wave Monopole	Solder	458			
712	ANT-868-SP	A	SP Series "The Splatch"- SMD Grounded Line 1/4-wave Monopole	Solder	868			
712	ANT-916-SP	A	SP Series "The Splatch"- SMD Grounded Line 1/4-wave Monopole	Solder	916			
712	ANT-868-JJB-RA	A	JJB Series - Permanent Mount Mini 1/4-wave Monopole Right Angle	Solder	868			
712	ANT-868-JJB-ST	A	JJB Series - Permanent Mount Mini 1/4-wave Monopole Straight Post	Solder	868			
712	ANT-916-JJB-RA	A	JJB Series - Permanent Mount Mini 1/4-wave Monopole Right Angle	Solder	916			
712	ANT-916-JJB-ST	A	JJB Series - Permanent Mount Mini 1/4-wave Monopole Straight Post	Solder	916			
712	ANT-2.4-JJB-RA	A	JJB Series - Permanent Mount Mini 1/4-wave Monopole Right Angle	Solder	2.45 GHz			
712	ANT-2.4-JJB-ST	A	JJB Series - Permanent Mount Mini 1/4-wave Monopole Straight Post	Solder	2.45 GHz			
712	ANT-868-CHP-B	A	CHP Series - Chip Antenna 1/4-wave Monopole, Bulk	Solder	868			
712	ANT-916-CHP-B	A	CHP Series - Chip Antenna 1/4-wave Monopole, Bulk	Solder	916			
712	ANT-2.45-CHP-B	A	CHP Series - Chip Antenna 1/4-wave Monopole, Bulk	Solder	2.45 GHz			
712	ANT-2.45-CHP-T	A	CHP Series - Chip Antenna 1/4-wave Monopole, Tape and Reel	Solder	2.45 GHz			
712	ANT-315-HESM	A	HE Series - Helical SMD 1/4-wave Monopole	Solder	315			
712	ANT-315-HETH	A	HE Series - Helical Through Hole 1/4-wave Monopole	Solder	315			
712	ANT-418-HESM	A	HE Series - Helical SMD 1/4-wave Monopole	Solder	418			
712	ANT-418-HETH	A	HE Series - Helical Through Hole 1/4-wave Monopole	Solder	418			
712	ANT-433-HESM	A	HE Series - Helical SMD 1/4-wave Monopole	Solder	433			
712	ANT-433-HETH	A	HE Series - Helical Through Hole 1/4-wave Monopole	Solder	433			
712	ANT-916-HESM	A	HE Series - Helical SMD 1/4-wave Monopole	Solder	916			
712	ANT-916-HETH	A	HE Series - Helical Through Hole 1/4-wave Monopole	Solder	916			

SPECIALTY ANTENNAS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig.	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-418-MHW-RPSS	B	MHW Series - Stick-On 1/2-wave Dipole (Short, 79" Cable)	RP-SMA	418			
712	ANT-418-MHWSMAS	B	MHW Series - Stick-On 1/2-wave Dipole (Short, 79" Cable)	SMA	418			
712	ANT-418-MHW-RPSL	B	MHW Series - Stick-On 1/2-wave Dipole (Long, 180" Cable)	RP-SMA	418			
712	ANT-418-MHW-SMAL	B	MHW Series - Stick-On 1/2-wave Dipole (Long, 180" Cable)	SMA	418			
712	ANT-433-MHW-RPSS	B	MHW Series - Stick-On 1/2-wave Dipole (Short, 79" Cable)	RP-SMA	433			
712	ANT-433-MHWSMAS	B	MHW Series - Stick-On 1/2-wave Dipole (Short, 79" Cable)	SMA	433			
712	ANT-433-MHW-RPSL	B	MHW Series - Stick-On 1/2-wave Dipole (Long, 180" Cable)	RP-SMA	433			
712	ANT-433-MHW-SMAL	B	MHW Series - Stick-On 1/2-wave Dipole (Long, 180" Cable)	SMA	433			
712	ANT-916-MHW-RPSS	B	MHW Series - Stick-On 1/2-wave Dipole (Short, 79" Cable)	RP-SMA	916			
712	ANT-916-MHWSMAS	B	MHW Series - Stick-On 1/2-wave Dipole (Short, 79" Cable)	SMA	916			
712	ANT-916-MHW-RPSL	B	MHW Series - Stick-On 1/2-wave Dipole (Long, 180" Cable)	RP-SMA	916			
712	ANT-916-MHW-SMAL	B	MHW Series - Stick-On 1/2-wave Dipole (Long, 180" Cable)	SMA	916			
712	ANT-DB1-HDP-RPS	B	HDP Series - Stick-On Horizontal 1/2-wave Dipole 860MHz/1.77GHz	RP-SMA	Dual Band			
712	ANT-DB1-HDP-TNC	B	HDP Series - Stick-On Horizontal 1/2-wave Dipole 860MHz/1.77GHz	TNC	Dual Band			
712	ANT-DB1-VDP-RPS	B	VDP Series - Stick-On Vertical 1/2-wave Dipole 860MHz/1.77GHz/2.45GHz	RP-SMA	Tri-Band			
712	ANT-DB1-VDP-TNC	B	VDP Series - Stick-On Vertical 1/2-wave Dipole 860MHz/1.77GHz/2.45GHz	TNC	Tri-Band			
712	ANT-DB1-RMS-RPS	B	RMS Series - Through-Hole Mount 860MHz/1.77GHz	RP-SMA	Dual Band			
712	ANT-DB1-RMS-TNC	B	RMS Series - Through-Hole Mount 860MHz/1.77GHz	TNC	Dual Band			
712	ANT-868-WRT-RPS	B	WRT Series - Compact Antenna	RP-SMA	868			
712	ANT-868-WRT-SMA	B	WRT Series - Compact Antenna	SMA	868			
712	ANT-916-WRT-RPS	B	WRT Series - Compact Antenna	RP-SMA	916			
712	ANT-916-WRT-SMA	B	WRT Series - Compact Antenna	SMA	916			
712	ANT-2.4-WRT-RPS	B	WRT Series - Compact Antenna	RP-SMA	2.45 GHz			
712	ANT-2.4-WRT-SMA	B	WRT Series - Compact Antenna	SMA	2.45 GHz			

MAGNETIC MOUNT ANTENNAS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig.	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-ELE-S01-005	C	ELE Series - Whip Element for MAG Series Bases	- -	860-960			
712	ANT-ELE-S01-006	C	ELE Series - Hi-Gain Whip-Element for MAG Bases	- -	824-960			
712	ANT-ELE-S01-010	C	ELE Series - Short Whip-Element for MAG Bases	- -	860-960			
712	ANT-ELE-S01-011	C	ELE Series - Stub Element for MAG Bases	- -	2.45 GHz			
712	ANT-MAG-B50-RPS	C	MAG Series - 50mm Magnetic Base	RP-SMA	- -			
712	ANT-MAG-B50-TNC	C	MAG Series - 50mm Magnetic Base	TNC	- -			
712	ANT-MAG-B66-RPS	C	MAG Series - 66mm Magnetic Base	RP-SMA	- -			
712	ANT-MAG-B66-TNC	C	MAG Series - 66mm Magnetic Base	TNC	- -			
712	ANT-MAG-B85-RPS	C	MAG Series - 85mm Magnetic Base	RP-SMA	- -			
712	ANT-MAG-B85-TNC	C	MAG Series - 85mm Magnetic Base	TNC	- -			

GPS ANTENNAS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig.	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-GPS-UC-SMA	D	UC Series - Active GPS Antenna	SMA	1575.42			
712	ANT-GPS-SH-MMX	D	SH Series -Active GPS Antenna	MMCX	1575.42			
712	ANT-GPS-SH-SMA	D	SH Series - Active GPS Antenna	SMA	1575.42			
712	ANT-DB2RMGRPRPSM	D	RMG Series - GPS & Ant Base, RP-SMA Ant, RP-SMA Cable, SMA GPS Conn	- -	1575.42			
712	ANT-DB2RMGSMRPSM	D	RMG Series - GPS & Ant Base, SMA Ant, RP-SMA Cable, SMA GPS Conn	- -	1575.42			

YAGI ANTENNAS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig.	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-418-YG5-N	E	YG Series - High Gain 5-Element Yagi	N	418			
712	ANT-916-YG5-N	E	YG Series - High Gain 5-Element Yagi	N	916			
712	ANT-2.4-YG12-N	E	YG Series - High Gain 12-Element Yagi	N	2.45 GHz			

ANTENNA SKINS

For quantities of 100 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Fig.	Description	Type	Frequency (MHz)	Price Each 1	25	50
712	ANT-SKN-V1-1.50	F	"Ant Skins" - 1.50" Cover for Wire or Rod Antennas	- -	- -			
712	ANT-SKN-V1-3.15	F	"Ant Skins" - 3.15" Cover for Wire or Rod Antennas	- -	- -			
712	ANT-SKN-V1-4.25	F	"Ant Skins" - 4.25" Cover for Wire or Rod Antennas	- -	- -			

A

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DLP DESIGN RFID and ZigBee™ Modules

Products may be RoHS compliant.
Check mouser.com for RoHS status.

DLP-RFID1 RFID READER AND WRITER

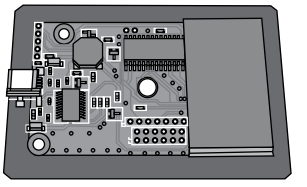
The DLP-RFID1 is a low-cost, USB-powered module for reading from and writing to ISO 15693, ISO 18000-3, and Tag-it™ intelligent RFID transponder tags. It has the ability to both read and write up to 256 bytes of data in addition to reading the unique identifier (UID/SID). All of the DLP-RFID1's electronics and antenna reside within the compact unit, and all operational power is taken from the host PC via the USB interface. The range of the internal antenna is up to 4 inches depending upon the size of the tag being read.

Features:
- ISO 15693, 18000-3, Tag-it™ HF-I Compatible
- Read UID/SID of Up to 15 Tags Simultaneously
- 13.56MHz Reader/Writer
- Built-in Antenna: Up to 4-Inch Read Range
- FCC/IC/CE Modular Approval in Place
- Permanent Unique Serial Number Accessible Via USB
- Integrated Pass/Fail Beeper
- USB Port Powered from Host PC (USB 1.1/2.0 Compatible)
- USB Drivers Provided for Windows XP, XPx64, Server2003, 2000, 98, ME
- Software Development Library Support for Visual C++/Visual Basic

Specifications:
- Reader Frequency: 13.56MHz
- Output Power: 200mW MAX
- Range (Integral Antenna): 4 Inches MAX
- Tags/Protocols Supported: Tag-It*, ISO18000-3, ISO15693
- Communications Interface: USB 1.1/2.0 Compatible, Mini-B 5-Pin Connector
- Operational Power – Active: 120mA
- Operational Power – Idle: 15mA
- Antenna: On-Board Antenna, SMA Position Available**
- USB Driver Support: Windows XP, XPx64, Server2003, 2000, 98, ME
- Physical Dimensions – OEM PCB: .20x2.17x3.12" typ. (5.1x55.1x79.3mm)
- Physical Dimensions – Retail Enclosure: .83x2.3x3.25" typ. (21.1x58.4x82.6mm)
- Operating Temperature: 0-70°C

Applications:
- Real-Time Securityv
- Personal Identification
- Pharmaceutical Tracking
- Inventory/Asset Management & Tracking
- Library/Book Management & Tracking
- Baggage Tagging
- Sports Event Timing

Retail Version

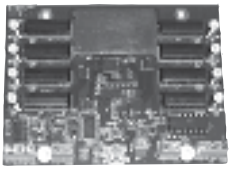

OEM Version

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Description	Price Each 1	Price Each 10
626-DLP-RFID1-RG	DLP-RFID1-RG	Includes reader, retractable USB cable and an assortment of tags		
626-DLP-RFID1-OG	DLP-RFID1-OG	OEM Board Only		
626-DLP-RFIDTAG	DLP-RFIDTAG	10 Pack of RFID Peel and Stick Tags		

DLP-RFID-LP8C 8-CHANNEL RFID READER/WRITER

The DLP-RFID-LP8C is a low-cost, USB-powered module for reading from and writing to ISO 15693, ISO 18000-3 and Tag-it™ intelligent RFID transponder tags via up to eight external antennas. It has the ability to both read and write up to 256 bytes of data in addition to reading the unique identifier (UID/SID). All of the DLP-RFID-LP8C's electronics reside on a single, compact PCB; and all operational power is taken from the host Windows/Windows CE/Linux PC via the USB interface. Up to eight external antennas can be connected via standard SMA connectors.


DLP-RFID-LP8C

DLP-RFID-ANT

Features:
- ISO 15693, 18000-3, 14443, Tag-it™ HF-I Compatible
- Can read the UID/SID of up to 15 Tags Simultaneously
- 13.56MHz Reader/Writer
- 8 Channels for External Antenna Connections
- FCC/IC/CE Modular Approvals in Place
- USB Port Powered from Windows, CE or Linux PC
- Both USB and RS232 Interfaces Provided
- USB Interface; No Driver Development Required for Windows, CE or Linux PC
- Operating Temperatures: 0°C to 70°C
- Dimensions: (L x W x H) 4.36" x 3.32" x 0.6

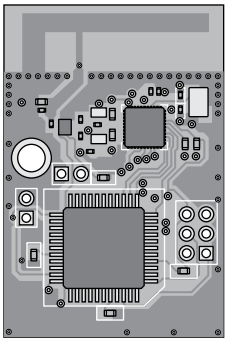
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	DLP Part No.	Description	Price Each 1
626-DLP-RFID-LP8C	DLP-RFID-LP8C	8-channel RFID reader	
626-DLP-RFID-ANT	DLP-RFID-ANT	Round Antenna w/Coax, with 15-foot cable	
626-DLP-FANT	DLP-FANT	Ferrite Antenna, DLP-COAX1 needed	
626-DLP-COAX1	DLP-COAX1	Coax w/RPSMA connector	

DLP 802.15.4/ZIGBEE™ READY MODULES

The DLP-RF1 and DLP-RF2 OEM Modules are short-range, low-power, 2.4GHz, unlicensed worldwide ISM band transceivers designed around the IEEE 802.15.4 Wireless Standard. Both support point-to-point and star network configuration using preprogrammed firmware.

DLP-RF2 (TTL Serial Interface)



DLP-RF2 - 2.4 GHZ OEM RF Transceiver Module

The DLP-RF2 combines a Freescale™ MC13192 2.4GHz Direct-Sequence, Spread-Spectrum RF Transceiver IC and Freescale MC9S08GT60 microcontroller to form an IEEE 802.15.4 compliant, ZigBee™ ready, short-range transceiver module. The DLP-RF2 connects to user electronics via a standard, 20-pin male header.

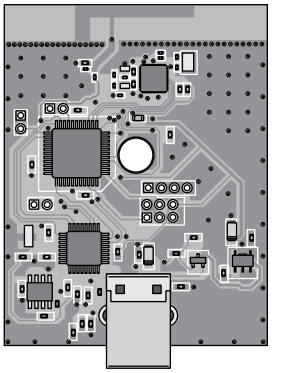
The MC9S08GT60 microcontroller is preprogrammed with DLP Design's Serial Interface Packet Processor (SIPP™ firmware) for accessing the transceiver functions via simple serial calls. Interface to an external serial host microcontroller/DSP/FPGA, etc. is accomplished via a simple 2-wire (RX, TX, and ground) interface.

RoHS Compliant

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Price Each 1	Price Each 10	Price Each 100	Price Each 250
626-DLP-RF2-Z-G	DLP-RF2-Z-G				

DLP-RF1-Z-G (Host Interface)



DLP-RF1 - 2.4 GHZ OEM RF USB Transceiver Module With USB Interface

The DLP-RF1 combines a USB interface, Freescale™ MC13192 2.4GHz Direct-Sequence Spread Spectrum RF Transceiver IC and Freescale MC9S08GT60 microcontroller to form an IEEE 802.15.4 compliant, ZigBee™ ready, short-range transceiver module.

The MC9S08GT60 microcontroller is preprogrammed with DLP Design's Serial Interface Packet Processor (SIPP™ firmware) for accessing the transceiver functions via simple serial calls. The application programming required for accessing the module via USB is functionally identical to that used to access the RS232C ports on a standard Windows/Linux/Mac PC via the use of royalty-free Virtual COM Port (VCP) drivers. (No USB driver development is required for most applications.) The SIPP firmware in the DLP-RF1 resides at the application layer and is based on Freescale's SMAC. The SIPP firmware provides basic access to DLP-RF1 functionality: packet receive and transmit, transceiver settings, EEPROM access, etc.

RoHS Compliant

For quantities of 50 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Description	Price Each 1	Price Each 10	Price Each 25
626-DLP-RF1-Z-G	DLP-RF1-Z-G	DLP-RF1-Z-G USB Transceiver Module for Computer Control Functions			

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FLEXIPANEL Zigbee and Bluetooth Modules

FlexiPanel

RoHS Compliant **This product is RoHS compliant.**

FlexiPanel designs and manufactures value-added RF modules and specializes in off-the-shelf solutions for OEMs, which include all RF circuitry, including antennas, and FCC/CE certifications. The aim is to make RF integration easy. FlexiPanel is also a leading provider of Bluetooth and ZigBee/IEEE 802.15.4 modules. The company regularly patents key aspects of its designs and is continually reinvesting in order to diversify its offering of modular electronics products.

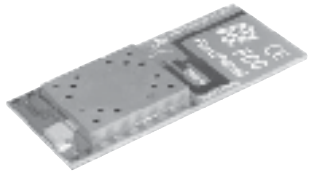
2.4 GHZ RF MODULES AND ADAPTERS

EasyBee is an IEEE 802.15.4 compliant RF transceiver. It enables designers to easily add ZigBee / IEEE 802.15.4 wireless capability to their products without the need for RF or antenna design expertise.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	FlexiPanel Part No.	Fig.	Description	Price Each 1	Price Each 10
132-EASYBEE_SO	EASYBEE_SO	A	2.4GHz Transceiver Module SO package		

A



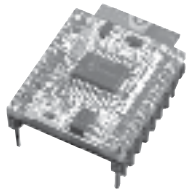
BLUETOOTH 2.0 TRANSCEIVERS

LinkMatik 2.0 is a serial / PCM audio to Bluetooth data link. It can be controlled from a host controller using simple commands. LinkMatik 2.0 can also operate without a host controller for point-to-point serial connections. Auto-Slave and Auto-Master modes allow LinkMatik 2.0 to operate a slave, master or wedded pair. LinkMatik is shipped in Auto-Slave mode.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	FlexiPanel Part No.	Fig.	Description	Price Each 1	Price Each 10
132-LINKMATIK-2-DIL	LINKMATIK 2 DIL	B	Dual In Line package, 3.3V - 5V		
132-LINKMATIK-2-SO	LINKMATIK 2 SO	C	Surface Mount package, 3.3V		

B



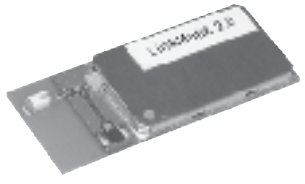
PIXIE ZIGBEE FFD MODULES

Pixie provides a complete ZigBee solution for OEMs, integrating IEEE 802.15.4 2.4GHz PHY / MAC layers with Microchip Technology's NWK / APL / ZDO layers. It provides a path for extremely rapid migration from Microchip's PICDEM Z ZigBee development environment to market-ready product. Pixie is capable of full function device (FFD) operation and is suitable for router and coordinator nodes. The lower cost Pixie Lite version is used for reduced function devices, e.g. endpoints, with 2 fewer I/O lines.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	FlexiPanel Part No.	Fig.	Description	Price Each 1	Price Each 10
132-PIXIE-PXMC-DIL	PIXIE-PXMC-DIL	D	ZigBee Modules PixieMAC Coordinator DIL		
132-PIXIE-PXMS-DIL	PIXIE-PXMS-DIL	-	ZigBee Modules PixieMAC Sleepy End Device DIL		
132-PIXIE-PXSC	PIXIE-PXSC	-	Switcher Coordinator firmware		

C



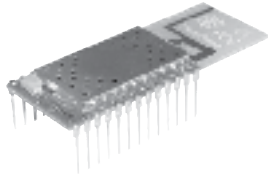
TOOTHPICK 2.0, PIC WITH BLUETOOTH

Toothpick is a PIC microcontroller and LinkMatik radio combination, preloaded with Toothpick Services firmware providing FlexiPanel user interface server, wireless field programming and Toothpick Slave for optional external host control.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	FlexiPanel Part No.	Fig.	Description	Price Each 1	Price Each 10
132-TOOTHPICK-2-DIL	TOOTHPICK 2 DIL	-	Toothpick 2.0, 28-pin DIL package, 3.3V - 5V		
132-TOOTHPICK-2L-SO	TOOTHPICK 2L SO	-	Toothpick 2.0 Lite, SO package, 3.3V		
132-TOOTHPICK-2-SO	TOOTHPICK 2 SO	-	Toothpick 2.0, SO package, 3.3V - 5V		

D



TEACLIPPER

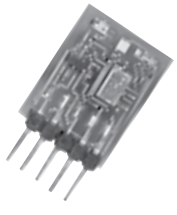
The World's Smallest PIC & Stamp Programmers Programming - Archiving - Firmware Sales - Field Updates

TEAclippers are a portable, target-powered firmware programmers for Microchip PIC microcontrollers and Parallax BASIC Stamps. About the same weight and size as a nickel (US 5 cent coin), they can be readily transported and plugged into a PCB or prototyping board containing the microcontroller requiring programming. TEAclippers makes it easy to sell firmware and also to deliver updates to products already delivered to customers.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	FlexiPanel Part No.	Fig.	Description	Price Each 1	Price Each 10
132-TEACLIPERPICHVPT	TEACLIPPER-PIC-HV-PT	E	Programmer TEAclipper/PIC HI-V		
132-TEACL-PIC-HV	TEACL-PIC-HV	E	Programmer TEAclipper/PIC HI/Low		
132-TEACL-PIC-LV	TEACL-PIC-LV	E	Programmer TEAclipper/PIC Low-V		
132-TEACL-STAMP	TEACL-STAMP	-	Programmer TEAclipper/Stamp		
132-TEACL-USB	TEACL-USB	-	Adapter USB TEAclipper		

E



USB PRODUCTS

Driver-free USB interfaces for Windows, Linux and Mac OS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	FlexiPanel Part No.	Description	Price Each 1	Price Each 10
132-USB-EXPANDIO-DIL	USB-EXPANDIO-DIL	Driver-free USB I/O expander forsoftware-controlled peripherals		
132-USB-EXPANDIO-PT	USB-EXPANDIO-PT	IC I/O expander USB 32B 44TQFP		
132-USB-EXPANDIO-SS	USB-EXPANDIO-SS	IC I/O expander USB 12B 20SSOP		
132-TEALEAF-USB-SS	TEALEAF-USB-SS	IC Encrypt Key 28-SSOP		
132-USB-232-DIL	USB-232-DIL	IC USB ASYNC SRL UART 28-DIL		
132-USB-232-SS	USB-232-SS	IC USB ASYNC SRL UART 20-SSOP		
132-USB-DAQ-DIL	USB-DAQ-DIL	IC System Data Logger 28-DIL		
132-USB-I2C-DIL	USB-I2C-DIL	IC USB SYNC SRL I2C 28-DIL		
132-USB-I2C-SS	USB-I2C-SS	IC USB SYNC SRL I2C 20-SSOP		
132-USB-SP-DIL	USB-SP-DIL	IC USB SYNC SRL SPI 28-DIL		
132-USB-SPI-SS	USB-SPI-SS	IC USB SYNC SRL SPI 20-SSOP		
132-USB-EVAL	USB-EVAL	Board Evaluation USB PROTO		
132-USB-CONFIG-DIL	USB-CONFIG-DIL	Driver-free USB embedded file system		
132-USB-CONFIG-SS	USB-CONFIG-SS	Driver-free USB embedded file system		

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FREESCALE ZigBee™ Wireless Solutions and Kits

FREESCALE ZIGBEE WIRELESS SOLUTIONS

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Freescale Semiconductor offers an extensive set of low cost wireless networking solutions, hardware and software, to provide you "A fast start to wireless networking."
Consider using Freescale Semiconductor's Transceiver or System-in-Package (SiP) solutions for the following applications. Application spaces include, but are not limited to:

- **Residential and Commercial Automation**
- **Industrial Control Applications**
- **Healthcare Products**
- **Consumer Products**

MC1320x Family of Generation II Transceivers

The MC1320x family is a series of short range, low power, 2.4 GHz ISM band second generation transceivers. The MC1320x family contains a complete packet data modem compliant with the IEEE® 802.15.4 standard PHY (Physical) layer. The solutions also offer an integrated TX/RX switch for fewer components and lower cost BOM. When combined with an appropriate MCU, the MC1320x family provides a cost-effective solution for short-range data links and networks.

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For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Channels	Package	Supply Voltage (V)	Frequency Band (GHz)	Serial Interface	Application	Communication Protocal	Price Each 1	25	100
841-MC13201FC	MC13201FC	16	1311 (QFN 32)	2 to 3.4V	2.4GHz	SPI	2.4GHz ISM	SIMPLE MAC			
841-MC13202FC	MC13202FC	16	1311 (QFN 32)	2 to 3.4V	2.4GHz	SPI	2.4GHz ISM, 802.15.4	IEEE 802.15.4			

MC1321x Family of System in a Package (SiP)

The MC1321x family is Freescale Semiconductor's ZigBee platform technology with a low power 2.4GHz RF transceiver and an 8-bit MCU in a 71-pin LGA package. The MC1321x family also offers broad range of integrated peripherals and interfaces including I2C, SCI, Timers/PWM, KBI, as well as an 8 channel 10-bit ADC. The combination of the radio and microcontrollers, as well as the incorporation of key peripherals and functions, in a small footprint package allows for a cost-effective solution.

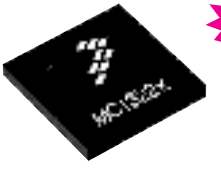
RoHS Compliant

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Channels	Package	Supply Voltage (V)	Frequency Band (GHz)	MCU Memory	Application	Communication Protocal	Price Each 1	25	100
841-MC13211	MC13211	16	LGA, 71-pin	2 to 3.4V	2.4GHz	16KB	2.4GHz ISM	SIMPLE MAC			
841-MC13212	MC13212	16	LGA, 71-pin	2 to 3.4V	2.4GHz	32KB	2.4GHz ISM, 802.15.4	IEEE 802.15.4			
841-MC13213	MC13213	16	LGA, 71-pin	2 to 3.4V	2.4GHz	60KB	2.4GHz ISM, ZIGBEE	IEEE 802.15.4 or BeeStack			

MC1322x Platform in a Package (PIP)

NEW! TECHNOLOGY



Freescale Semiconductor's third-generation 2.4 GHz IEEE® 802.15.4 platform takes a leap forward in processing power and system integration, while lowering power consumption up to 50% from previous generations. A fully functional 32-bit TDMI ARM7 processor with a combination of ROM, RAM and flash memory provides the highest level of integration and performance in the market today.

RoHS Compliant

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Core	Flash	RAM / ROM	Channels	Package	Application	Communication Protocal	Price Each 1	25	100
841-MC13224V	MC13224V	ARM7	128K	96K / 80K	16	LGA, 99-pin	2.4GHz ISM Band	IEEE 802.15.4 MAC			

FREESCALE ZIGBEE DEVELOPMENT KITS WITH BEEKIT™ WIRELESS CONNECTIVITY TOOLKITS

RoHS Compliant

Freescale Semiconductor provides a range of comprehensive yet cost-effective development tools designed to provide developers with the necessary hardware and software required to evaluate and develop wireless solutions ranging from simple point-to-point networks to ZigBee mesh networks.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Description	BeeKit™ Included	Price Each
841-1320X-QE128-DSK	1320X-QE128-DSK	1320x QE Evaluation Kit	Yes	
841-1320X-QE-DSK-BDM	1320X-QE-DSK-BDM	1320x QE Evaluation Kit w/BDM Cable	Yes	
841-1320XRFC	1320XRFC	MC1320x RF Daughter Card	Yes	
841-1321XDSK	1321XDSK	1321x Developer's Starter Kit	Yes	
841-1321XDSK-BDM	1321XDSK-BDM	1321x Developer's Starter Kit with BDM	Yes	
841-1321XNSK	1321XNSK	1321x Network Starter Kit	Yes	
841-1321XNSK-BDM	1321XNSK-BDM	1321x Network Starter Kit with BDM	Yes	
841-1321XEVK	1321XEVK	1321x Evaluation Kit	Yes	
841-1322XDSK-DBG	1322XDSK-DBG	1322x Developer's Starter Kit w/ J-LINK	Yes	
841-1322XNSK-DBG	1322XNSK-DBG	1322x Network Starter Kit w/ J-LINK	Yes	
841-1322XNSK-IAR	1322XNSK-IAR	1322x Network Starter Kit w/Baseline Version	Yes	
841-1322XUSB	1322XUSB	1322x USB Board	Yes	

BeeKit™ Wireless Connectivity Toolkit

Freescale's BeeKit development environment for Windows operating systems provides a GUI in which users can create, modify, save and update wireless network solutions based on Freescale's Simple MAC (SMAC), IEEE 802.15.4 PHY/MAC and BeeStack ZigBee protocol stack. BeeKit provides a wizard and solution explorer that allows the user to quickly and easily configure parameters before creating the project, greatly reducing the need to sift through individual files and manually configure parameters. With the comprehensive code base of wireless networking libraries, application templates, and sample applications, the user generates the appropriate workspace files to be imported into an integrated development environment (IDE) for continued development and debugging.

Download your complimentary BeeKit at **www.Freescale.com/Zigbee**

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CEL Embedded RF Wireless Products

California Eastern Laboratories

802.15.41 ZIGBEE SOLUTIONS

RoHS Compliant **This page of product is compliant.**

CEL's comprehensive line of ZigBee solutions includes ICs, modules, and software application packages designed for use in mesh, point-to-point, and point-to multipoint systems. They provide a fully integrated, easy-to-use transceiver solution for IEEE 802.15.4 networks. CEL ZigBee modules and ICs are ideal for remote sensing, AMR/AMI, home and building automation, and security applications.

Integrated RF Transceiver/MCU for ZigBee /IEEE 802.15.4/SNAP Networks

Key Features:
- Industry leading RF Link Budget @ 106 dB
- Embedded 8051 Compatible MCU with 96KB/8KB Flash/RAM
- Scalable Data Rate: 250kbps for ZigBee, 500kbps
- Voice Codec Support
- 4 Level Power Management Scheme
- Single Voltage Operation of 1.9 to 3.3V
- Hardware MAC

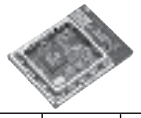
RoHS Compliant

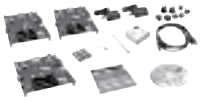
For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	CEL Part No.	Operating Frequency (MHz)	Supply Voltage (V)	Output Power	Sensitivity	MCU	Flash Memory	Data Memory	Price Each 1	10	100	500
551-ZIC2410QN48	ZIC2410QN48	2400 to 2483	1.5 -3.3V	+8 dBm	-98 dBm	8-bit	96 KB	8 KB				

Mesh Connect™ Modules – ZICM2410P0 Series

Key Features:
- Scalable Data Rate : 250kbps for Zigbee, 500kbps and 1Mbps
- Voice Codec Support: µ-law/a-law/ADPCM
- 4 Level Power Management Scheme w/ Deep Sleep Mode (0.3µA)
- 16 RF Channels
- Over 3000 feet of range
- AES 128-bit encryption





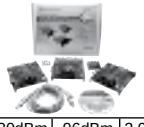
RoHS Compliant

For quantities of 50 and up, call for quote.

MOUSER STOCK NO.	CEL Part No.	Description	Transceiver Chipset	Fmax	I/O	Network	Tx Power Output	Rx Sensitivity	Range	Vcc	Rx Current	Tx Current	Price Each 1	10	25
551-ZICM2410P0-1	ZICM2410P0-1	PCB Trace Antenna	MeshConnect™ ZIC2410 8-BIT, 8051	16 MHz	22	Mesh, Point to Point, Point to Multipoint	+6 dBm	-97dBm	3000+ft	2.1V-3.0V	35mA	44mA			
551-ZICM2410P0-1C	ZICM2410P0-1C	U. FL Conn. for Ext. Ant.		16 MHz	22		+6 dBm	-97dBm	3000+ft	2.1V-3.0V	35mA	44mA			
551-ZICM2410P2-1	ZICM2410P2-1	PCB Trace Antenna		16 MHz	20		+20 dBm	-103.5dBm	12,000+ft	2.1V-3.3V	38mA	175mA			
551-ZICM2410P2-1C	ZICM2410P2-1C	U. FL Conn. for Ext. Ant.		16 MHz	20		+20 dBm	-103.5dBm	12,000+ft	2.1V-3.3V	38mA	175mA			
Mesh Connect Development Kit			**Description**												
551-ZICM2410P0KIT2-1	ZICM2410P0-KIT2-1	Engineering Dev. Kit	Eval Boards with Module-Network Analyzer-Univ AC/DC Pwr Supply-USB Cables-Software & Technical Information CD											- - -	- - -
551-ZICM2410P2KIT1-1	ZICM2410P2-KIT1-1	Engineering Dev. Kit	Eval Boards with Module-USB Cables-Jumpers-Software & Technical Information CD											- - -	- - -

FreeStar Pro Transceiver Modules – ZFSM-201-1 Series

Key Features:
- 32-bit ARM7TDMi based microprocessor
- Extensive on-board memory resources
- Up to 100 mW output power
- Over 4000 feet of range
- AES 128-bit encryption



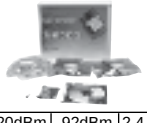
RoHS Compliant

For quantities of 50 and up, call for quote.

551-ZFSM-201-1	ZFSM-201-1	PCB Trace Antenna	MC13224V 32-bit ARM7	32MHz	46	Point to Point, Point to Multipoint, Mesh	+20dBm	-96dBm	2.0-3.6V	30mA	193mA			
551-ZFSM-201-1C	ZFSM-201-1C	MMCX Conn. for Ext. Ant.	MC13224V 32-bit ARM7	32MHz	46	Point to Point, Point to Multipoint, Mesh	+20dBm	-96dBm	2.0-3.6V	30mA	193mA			
FreeStar Pro Evaluation Kit			Description											
551-ZFSM-201-KIT-1	ZFSM-201-KIT-1	Engineering Eval. Kit	Eval Board w/ Module, USB Cables, Software & Technical Information, Jumpers & Batteries										-	-

FreeStar Transceiver Modules – ZFSM-101-1 Series

Key Features:
- Up to 100 mW output power
- Low power consumption: 125mA @ 10mW output, 150mA @ 100mW
- Over 4000 feet of range
- Simple UART interface



RoHS Compliant

For quantities of 50 and up, call for quote.

551-ZFSM-101-1	ZFSM-101-1	PCB Trace Antenna	Freescale MC13192 8-bit	40MHz	8	Point to Point, Point to Multipoint, Mesh	+20dBm	-92dBm	2.4-3.6V	42mA	150mA			
FreeStar Evaluation Kit			Description											
551-ZFSM-101-KIT-1	ZFSM-101-KIT-1	Engineering Eval. Kit	Evaluation Boards, Zigbee Modules, RS-232 Serial Cables, Technical Information CD, Jumpers & Batteries										-	-

Apex & Apex LT Modules

ZAXM-201-1 Apex Module Features:
- Ember™ EM250 platform
- 128kB Flash memory
- 5kB SRAM
- 16-bit XAP2b microprocessor
- 16 general purpose I/O ports
- DMA - SPI, I²C and UART interface
- Integrated ADC with 12-bit resolution

ZALM-301-1 Apex LT Module Features:
- Ember™ EM260 platform
- Integrated IEEE 802.15.4 PHY and MAC
- Dedicated network processor
- SPI or UART interface to application microcontroller
- Handles all ZigBee processing and timing sensitive tasks

Description	APEX	APEX LT	Description	APEX	APEX LT
Power Supply Voltage	3.6Vdc	3.6Vdc	Transmit Mode	170mA	170mA
RF Input Power	+10dBm	+10dBm	Receive Mode	37mA	37mA
RF Data Rate	250kbps	250kbps	Nominal Output Power	20dBm	20dBm
Flash Memory	128kB	- -	Rec. Sens. (normal)	-96dBm	-96dBm
RAM	5kB	- -			

MOUSER STOCK NO.	CEL Part No.	Description	Frequency Min./Max.	Price Each 1	10	25	50
551-ZAXM-201-1	ZAXM-201-1	100 mW Output power, PCB Trace Antenna	2400/2483.5				
551-ZAXM-201-1C	ZAXM-201-1C	100 mW Output power, MMCX Connector	2400/2483.5				
551-ZALM-301-1	ZALM-301-1	100 mW Output power	2400/2483.5				
551-ZALM-301-1C	ZALM-301-1C	100 mW Output power, MMCX Connector	2400/2483.5				
551-ZAXM-201-KIT-1	ZAXM-201-KIT-1	100mW Apex Evaluation Kit	2400/2483.5		-	-	-

Matrix Transceiver Modules

- Supports LS Research or Z-Stack™ protocols
- Miniature Footprints: 10mW (23 x 28.7 mm), 100mW (23 x 31.2 mm)
- Integrated certified PCB trace antenna
- Optional MMCX connector for external antenna
- 16 RF channels
- 17 general purpose I/O ports
- Windows® Based Test Tools
- Serial UART interface
- Low power consumption
- Long Range: 10 mW - up to 2,000 feet, 100 mW - up to 4,000 feet
- Output power software controlled: 1mW - 10mW or 1mW - 100mW

Description	10mW	100mW	Description	10mW	100mW
Power Supply Voltage	3.6 Vdc	3.6 Vdc	RAM	8 kB	8 kB
RF Input Power	+10 dBm	+10 dBm	Transmit Mode	50 mA	130 mA
RF Data Rate	250kbps	250 kbps	Receive Mode	33 mA	33 mA
Host Data Rate	115.2	115.2	Nominal Output Power	10 dBm	20 dBm
Flash Memory	128 kB	128 kB	Rec. Sens. (normal)	-92 dBm	-92 dBm

MOUSER STOCK NO.	CEL Part No.	Description	Frequency Min./Max.	Operating Voltage (Vdc) Min./Max.	Price Each 1	10	25	50
551-ZMXM-400-1	ZMXM-400-1	Matrix Module (10mW) w/ PCB Trace Antenna	2400/2483.5	2.1 - 3.6				
551-ZMXM-400-1C	ZMXM-400-1C	Matrix Module (10mW) w/ MMCX Connector	2400/2483.5	2.1 - 3.6				
551-ZMXM-400-KIT-2	ZMXM-400-KIT-2	Matrix Module Engineering Evaluation Kit	2400/2483.5	-----		-	-	-
551-ZMXM-401-1	ZMXM-401-1	Matrix Module (100mW) with PCB Trace Antenna	2400/2483.5	2.4 - 3.6				
551-ZMXM-401-1C	ZMXM-401-1C	Matrix Module (100mW) w/ MMCX Connector	2400/2483.5	2.4 - 3.6				

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SILICON LABS Wireless Solutions

RoHS Compliant **This product is RoHS compliant.**

EZRADIO®

The Silicon Labs EZRadio family of fully integrated, low power, low data rate, low cost ICs are designed to meet the needs of OEMs developing mesh network applications for both consumer and industrial monitoring and control. EZRadio products support proprietary and de facto standard point-to-point, star, and mesh networks, as well as complex, standards-based mesh network applications.

Transmitter ICs

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Package	Modulation Mode	Data Rate FSK, OOK (kbps)	Frequency Range (MHz)	Output Power		Supply Voltage (V)	Idle Current (mA)	Price Each		
						868 MHz	434 MHz			1	25	100
634-SI4020-I1-FT	Si4020-I1-FT	TSSOP16	FSK, OOK	256, 256	315, 433, 868, 915	1 dBm	3 dBm	2.2-5.4	1.5			
634-SI4021-A1-FT	Si4021-A1-FT	TSSOP16	FSK, OOK	115, 512	433, 868, 915	6 dBm	8 dBm	2.2-5.4	1.5			

Receiver ICs

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Package	Modulation Mode	Data Rate FSK, OOK (kbps)	Frequency Range (MHz)	Output Power		Supply Voltage (V)	Idle Current (mA)	Price Each		
						868 MHz	434 MHz			1	25	100
634-SI4320-J1-FT	Si4320-J1-FT	TSSOP16	FSK, OOK	256, 1	315, 433, 868, 915	-	-	2.2-5.4	3			
634-SI4322-A0-FT	Si4322-A0-FT	TSSOP16	FSK	256	433, 868, 915	-	-	2.2-3.8	0.5			

Transceiver ICs

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Package	Modulation Mode	Data Rate FSK (kbps)	Frequency Range (MHz)	Output Power		Supply Voltage (V)	Idle Current (mA)	Price Each		
						868 MHz	434 MHz			1	25	100
634-SI4420-D1-FT	Si4420-D1-FT	TSSOP16	FSK	256	315, 433, 868, 915	2 dBm	3 dBm	2.2-5.4	3			
634-SI4421-A1-FT	Si4421-A1-FT	TSSOP16	FSK	115	315, 433, 868, 915	7 dBm	5 dBm	2.2-3.8	0.6			

EZRADIOPRO™

While including all the attractive features of the EZRadio® products such as high integration, low cost, flexibility, low BOM, and easy design-in, EZRadioPRO targets more sophisticated applications and features continuous frequency coverage from 240 - 960 MHz, and output power up to +20 dBm, built-in wake-up timer, low battery detector, transmit and receive data FIFOs, power-on reset circuit, and general purpose digital I/Os.

Transmitter ICs

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Package	Modulation Mode	Data Rate (kbps)		Frequency Range (MHz)	Output Power	Supply Voltage (V)	Idle Current (mA)	Price Each		
				FSK/GFSK	OOK					1	25	100
634-SI4030-A0-FM	Si4030-A0-FM	QFN 20	FSK, GFSK, OOK	128	40	900 - 960	-8 to +13	1.8 - 3.6	27			
634-SI4031-B1-FM	Si4031-B1-FM	QFN 20	FSK, GFSK, OOK	128	40	240 - 930	-8 to +13	1.8 - 3.6	27			
634-SI4032-V2-FM	Si4032-V2-FM	QFN 20	FSK, GFSK, OOK	128	40	240 - 930	+11 to +20	1.8 - 3.6	27			

Receiver ICs

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Package	Modulation Mode	Data Rate (kbps)		Frequency Range (MHz)	Output Power	Supply Voltage (V)	Receive Current (mA)	Price Each		
				FSK/GFSK	OOK					1	25	100
634-SI4330-B1-FM	Si4330-B1-FM	QFN 20	FSK, GFSK, OOK	128	40	240 - 930	-	1.8 - 3.6	18.5			

Transceiver ICs

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Package	Modulation Mode	Data Rate (kbps)		Frequency Range (MHz)	Output Power	Supply Voltage (V)	Idle Current (mA)	Price Each		
				FSK/GFSK	OOK					1	25	100
634-SI4430-B1-FM	Si4430-B1-FM	QFN 20	FSK, GFSK, OOK	128	40	900 - 960	-8 to +13	1.8 - 3.6	18.5 / 27			
634-SI4431-B1-FM	Si4431-B1-FM	QFN 20	FSK, GFSK, OOK	128	40	240 - 930	-8 to +13	1.8 - 3.6	18.5 / 27			
634-SI4432-B1-FM	Si4432-B1-FM	QFN 20	FSK, GFSK, OOK	128	40	240 - 930	-11 to +20	1.8 - 3.6	18.5 / 27			

SI100X/1X SINGLE CHIP WIRELESS MCU

The Si100x/1x family is the lowest power single chip MCU with integrated sub-GHz RF transceiver. It has been designed to address the specific requirements of low power embedded systems requiring a RF bi-directional communication link such as metering, in-home utility monitoring, wireless security panels, wireless sensors, home & building automation, and access control.

Specifications:
- Peak MIPS: 25
- Communications: I2C, SPI, UART
- Timers (16-bit): 4
- QFN-42 Package Style

NEW PRODUCT

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Silicon Labs Part No.	Flash (bytes)	RAM (bytes)	Digital Port I/O Pins	ADC 1	+11/+20 dBm TX Current (mA)	+13 dBm TX Current (mA)	Price Each		
								1	25	100
634-SI1000-C-GM	Si1000-C-GM	64	4352	22	10-bit, 18-ch., 300 ksps	35/85	-			
634-SI1001-C-GM	Si1001-C-GM	32	4352	22	10-bit, 18-ch., 300 ksps	35/85	-			
634-SI1002-C-GM	Si1002-C-GM	64	4352	22	10-bit, 18-ch., 300 ksps	-	30			
634-SI1003-C-GM	Si1003-C-GM	32	4352	22	10-bit, 18-ch., 300 ksps	-	30			
634-SI1004-C-GM	Si1004-C-GM	64	4352	19	10-bit, 15-ch., 300 ksps	-	30			
634-SI1005-C-GM	Si1005-C-GM	32	4352	19	10-bit, 15-ch., 300 ksps	-	30			
634-SI1010-A-GM	Si1010-A-GM	16	768	15	12-bit, 11-ch, 75ksps	35/85	-			
634-SI1011-A-GM	Si1011-A-GM	8	768	15	12-bit, 11-ch, 75ksps	35/85	-			
634-SI1012-A-GM	Si1012-A-GM	16	768	15	12-bit, 11-ch, 75ksps	-	30			
634-SI1013-A-GM	Si1013-A-GM	8	768	15	12-bit, 11-ch, 75ksps	-	30			
634-SI1014-A-GM	Si1014-A-GM	16	768	15	12-bit, 11-ch, 75ksps	-	30			
634-SI1015-A-GM	Si1015-A-GM	8	768	15	12-bit, 11-ch, 75ksps	-	30			

DEVELOPMENT TOOLS AND TEST CARDS

MOUSER STOCK NO.	Silicon Labs Part No.	Description	Price Each
634-4021-DKDB10	4021-DKDB10	Test Board loop Tx (915/868MHz)	
634-4021-DKDB11	4021-DKDB11	Test Board loop Tx (434MHz)	
634-4021-DKDB13	4021-DKDB13	Test Board 50 Ohm Tx (915/868MHz)	
634-4021-DKDB14	4021-DKDB14	Test Board 50 Ohm Tx (434MHz)	
634-4021-DKDB2	4021-DKDB2	Test Board BIFA Tx (915MHz)	
634-4021-DKDB3	4021-DKDB3	Test Board BIFA Tx (868MHz)	
634-4021-DKDB7	4021-DKDB7	Test Board xloop Tx (915/868MHz)	
634-4022-DKDB13	4022-DKDB13	Test Board 50 Ohm Tx (915/868MHz)	
634-4320-DKDB1	4320-DKDB1	Test Board 50 Ohm Rx (915/868MHz)	
634-4320-DKDB10	4320-DKDB10	Test Board xloop Rx (434MHz)	
634-4320-DKDB2	4320-DKDB2	Test Board 50 Ohm Rx (434MHz)	
634-4320-DKDB4	4320-DKDB4	Test Board BIFA Rx (915MHz)	
634-4320-DKDB5	4320-DKDB5	Test Board BIFA Rx (868MHz)	
634-4320-DKDB8	4320-DKDB8	Test Board xloop Rx (915MHz)	
634-4320-DKDB9	4320-DKDB9	Test Board xloop Rx (868Mhz	
634-4322-DKDB1	4322-DKDB1	Test Board 50 Ohm Rx (915/868MHz)	
634-4420-DKDB1	4420-DKDB1	Test Board 50 Ohm TRx (915MHz)	
634-4420-DKDB2	4420-DKDB2	Test Board 50 Ohm TRx (434MHz)	

NEW PRODUCT

MOUSER STOCK NO.	Silicon Labs Part No.	Description	Price Each
634-4421-DKDB2	4421-DKDB2	Test Board 50 Ohm TRx (434MHz)	
634-4432-DKDB2	4432-DKDB2	Single Antenna TRx Testcard Hi band	
634-4432-DKDB1	4432-DKDB1	Tx/Rx Split 4432 TRx Testcard Hi band	
634-4432-DKDB0	4432-DKDB0	Ant. Diversity 4432 Testcard High band	
634-SI1000DK	Si1000DK	Si100x Programmable XCVR Development Kit	
634-SI1010DK	Si1010DK	Si101x Programmable XCVR Development Kit	
634-1000-TCB1C915	1000-TCB1C915	Test Card S Switch Ant. for Si1000-C-GM 915 MHz	
634-1000-TCB1C470	1000-TCB1C470	Test Card S Switch Ant. for Si1000-C-GM 470 MHz	
634-1002-TCB1D868	1002-TCB1D868	Test Card Tied Antenna for Si1002 868 MHz	
634-1002-TCB1D434	1002-TCB1D434	Test Card Tied Antenna for Si1002 434 MHz	
634-1004-TCB1D868	1004-TCB1D868	Test Card Tied Antenna for Si1004 868 MHz	
634-1004-TCB1D434	1004-TCB1D434	Test Card Tied Antenna for Si1004 434 MHz	
634-1010-TAB1C915	1010-TAB1C915	Test Card S Switch Antenna for Si1010 915 MHz	
634-1010-TAB1C470	1010-TAB1C470	Test Card S Switch Antenna for Si1010 470 MHz	
634-1012-TAB1D868	1012-TAB1D868	Test Card Tied Antenna for Si1012 868 MHz	
634-1012-TAB1D434	1012-TAB1D434	Test Card Tied Antenna for Si1012 434 MHz	
634-1014-TAB1D868	1014-TAB1D868	Test Card Tied Antenna for Si1014 868 MHz	
634-1014-TAB1D434	1014-TAB1D434	Test Card Tied Antenna for Si1014 434 MHz	

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Embedded RF Wireless Products

Products may be RoHS compliant.
Check mouser.com for RoHS status.

XTEND™ OEM RF MODULE (CONT.)

XTend PKG Product

MOUSER STOCK NO.	Digi Intl. Part No.	Frequency	OTA Data Rate	Interface	Accessories	Price Each
888-XT09-PKC-UA-NA	XT09-PKC-UA-NA	900 MHz- XTend	9600	USB	Yes	
888-XT09-PKI-RA-NA	XT09-PKI-RA-NA	900 MHz- XTend	9600	RS232	Yes	
888-XT09-PKC-UA	XT09-PKC-UA	900 MHz- XTend	9600	USB	Yes	
888-XT09-PKI-RA	XT09-PKI-RA	900 MHz- XTend	9600	RS232	Yes	

XCITE™ OEM RF MODULE

The 9XCite OEM RF Module was engineered to provide reliable low-cost wireless communications for OEMs and integrators. This affordable RF module is smaller than a credit card and supplies wireless links between devices that require minimal setup, power and cost. The module is optimized to operate in the ISM 900MHz frequency bands for agency-approved use throughout North America. The 9XCite (900MHz) is pin-for-pin and software compatible with the 9XStream (900MHz) OEM RF Module, allowing for flexible deployment of your products throughout the world (only one OEM board design needed).

Xcite OEM Modules (North & South America)

MOUSER STOCK NO.	Digi Intl. Part No.	Frequency	OTA Data Rate	Interface	Accessories	Price Each
888-XC09-009WNC	XC09-009WNC	9XCite	4mW transceiver	3" wire antenna	9600bps	
888-XC09-038WNC	XC09-038WNC	9XCite	4mW transceiver	3" wire antenna	38400bps	
888-XC09-009NSC	XC09-009NSC	9XCite	4mW transceiver	RPSMA	9600bps	
888-XC09-038NSC	XC09-038NSC	9XCite	4mW transceiver	RPSMA	38400bps	
888-XC09-009WNI	XC09-009WNI	9XCite	4mW transceiver	3" wire antenna	9600bps	
888-XC09-038WNI	XC09-038WNI	9XCite	4mW transceiver	3" wire antenna	38400bps	
888-XC09-009NSI	XC09-009NSI	9XCite	4mW transceiver	RPSMA	9600bps	
888-XC09-038NSI	XC09-038NSI	9XCite	4mW transceiver	RPSMA	38400bps	

Xcite Technology Development Kits

MOUSER STOCK NO.	Mfr. Part No.	Description	Price Each
888—XC09-009-DK		915MHz, 5mW, Development Kit, 9600 baud, 3" wire & RPSMA connector	
888—XC09-038-DK		915MHz, 5mW, Development Kit, 38.4kbps, 3" wire & RPSMA connector	

Antennas - 915MHz

MOUSER STOCK NO.	Mfr. Part No.	Description	Price Each
888—A09-HASM-675		6" half wave, (2.1dBi) articulating	
888—A09-HSM-7		6" half wave, (2.1dBi) non-articulating	
888—A09-HTM-675		6" half wave, (2.1dBi) straight antenna	
888—A09-HBMM-P5I		7" half wave, bulkhead, MMCX connector	
888—A09-HBSM-P5I		7" half wave, bulkhead mount, RPSMA connector	
888—A09-QRAMM		3" quarter wave (1.9dBi) MMCX wire antenna	
888—A09-Y8NF		Yagi, 8.1 dBi (6dBd) Directional w/ N-female Connector	
888—A09-Y11NF		11.1 dBi (9dBd) Directional Yagi Antenna w/ N-female Connectorv	
888—A09-Y15NF		15.1 dBi (13dBd) Directional Yagi Antenna w/ N-female Connector	
888—A09-F5NF-M		Base Station, 5.1 dBi gain (3dBd)	
888—A09-F8NF-M		Base Station, 8.1 dBi gain (6dBd)	
888—A09-Y15TM-P10I		Yagi, 15dBi, directional	

PKG Interface Boards

MOUSER STOCK NO.	Mfr. Part No.	Description	Price Each
888—XIB-U		USB interface board (9XStream, 24XStream, 9XCite)	
888—XIB-E		Ethernet interface board (9XStream, 24XStream, 9XCite)	
888—XTIB-R		1W RS-232/485 interface board (9XTend)	
888—XTIB-U		1W USB interface board (9XTend)	
888—XTAB-A		9XTend Adapter board for 9XStream OEM modules w/ accessories	
888—XTAB		9XTend Adapter board for 9XStream OEM modules w/o accessories	

Antennas - 2.4GHz

MOUSER STOCK NO.	Mfr. Part No.	Description	Price Each
888—A24-HASM-450		2.4GHz Half-wave articulated joint	
888—A24-HASM-525		6" half wave dipole	
888—A24-HABUF-P51		2.4Ghz antennas U.FL	
888—A24-HABMM-P5I		7" half wave, bulkhead	
888—A24-QABMM-P5I		3" qtr wave, bulkhead	
888—A24-P8NF		1 patch panel, 8.5dBi gain	
888—A24-P19NF-PP		16 patch panel, 19dBi gain	

MICROCHIP 2.4 GHz IEEE STD. 802.15.4™ RF TRANSCEIVER MODULE, MRF24J40MA PICDEM Z RF BOARD AND MRF24J40MA PICTAIL PLUS 2.4 GHz RF CARD

MRF24J40MA is a certifed 2.4GHz IEEE 802.15.4 radio transceiver module. The MRF24J40MA has an integrated PCB antenna, matching circuitry, and supports the ZigBee™, MiWi™ and MiWi P2P protocols. The MRF24J40MA Module connects to hundreds of PIC® microcontrollers via a 4-wire SPI interface and is an ideal solution for wireless sensor networks, home automation, building automation and consumer applications.

The AC164134 PICTail Plus 2.4GHz RF card includes the Microchip MRF24J40MA transceiver module. The MRF24J40MA is an agency certified module with an integrated PCB antenna mounted on a PICTail Plus edge connector board for the Explorer 16 Development environment.

Features:

- IEEE Std. 802.15.4™ Compliant RF Transceiver
- Supports ZigBee®, MiWi™, MiWi™ P2P and Proprietary Wireless Networking Protocols
- Up to 400m Range (outdoor, line-of-sight)
- Integrated Crystal, Internal Voltage Regulator, Matching Circuitry and PCB Antenna
- Easy Integration into Final Product – Minimize Product Development, Quicker Time to Market
- Radio Regulation Certification for United States (FCC), Canada (IC) and Europe (ETSI)
- Small Size: 0.7" x 1.1" (17.8 mm x 27.9 mm), Surface Mountable
- Compatible with Microchip Microcontroller Families (PIC16F, PIC18F, PIC24F/H, dsPIC33 and PIC32)

MOUSER STOCK NO.	MIcrochip Part No.	Description	Price Each
579-MRF24J40MA-I/RM	MRF24J40MA-I/RM	2.4GHz IEEE 802.15.4 Transceiver Module	
579-MRF24J40MB-I/RM	MRF24J40MB-I/RM	2.4 GHz IEEE 802.15.4 Ext. Range Transceiver Module	
579-AC163028	AC163028	MRF24J40MA PICDEM Z 2.4GHz RF Board	
579-AC164134	AC164134	MRF24J40MA PICTail Plus 2.4GHz RF Card	

MICROCHIP MRF49XA SUB-GHZ TRANSCEIVER RADIO AND PICTAIL PLUS DAUGHTER BOARDS

MRF49XA ia a fully integrated Sub-GHz RF transceiver supporting the 434/868/915MHz ISM frequency band. The MRF49XA supports FSK modulation with FHSS capability is ideal for two-way, short-range wireless applications.

MOUSER STOCK NO.	MIcrochip Part No.	Description	Price Each			
			1	10	25	100
579-MRF49XA-I/ST	MRF49XA-I/ST	433-930MHz Transceiver				
579-AC164137-1	AC164137-1	434MHz Daughter Board		-	-	-
579-AC164137-2	AC164137-1	868/915MHz Daughter Board		-	-	-

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PHOENIX CONTACT Wireless I/O Systems

RoHS Compliant **This product is RoHS compliant.**

900MHZ TRUSTED WIRELESS ETHERNET RADIO

The RAD-ISM-900-EN-utilizes the MOTR-9™ radio platform, a 1W frequency-hopping, spread spectrum transceiver operating in the license-free 902-928MHz ISM band. The MOTR-9 features user configurable over-the-air data rates up to 500kbps with adjustable packet sizes to move data quickly and minimize latency. Like other devices in the RAD-Line product group, the unit supports master, slave and repeater operational modes and has integrated RS-232 and RS-422/485 serial ports allow the incorporation of serial data into an Ethernet network.

Features:
- 1 watt transmit power
- Interference free frequency Hopping Spread Spectrum Technology
- License free 902 - 928MHz ISM Band
- Temperature Range: -40°±60°C
- Programmable via any web browser
- 128/192/256-bit AES encryption

RoHS Compliant

MOUSER STOCK NO.	Phoenix Type	Fig.	Description	Price Each
651-2900016	RAD-ISM-900-EN-BD	A	Trusted Wireless Ethernet Radio (TWE) with MOTR-9 Technology for ethernet and Serial data over a secure radio connection.	

900MHZ ONE-WAY WIRELESS SYSTEMS

With these unidirectional radio systems it is possible to record and safely transmit an analog and two digital sensor signals. With very simple installation, it is possible to collect signals where cables cannot be laid or can only be laid with great difficulty. In addition to point to point connections, the possibilities also exists of constructing multi-receiver systems. The sets include a receiver, transmitter, and antennas with connecting cable.

Features:
- 1 watt transmit power
- Interference free - Frequency Hopping Spread Sprectrum technology
- Licence free 902 - 928MHz Industrial, Scientific, and Medical (ISM) band
- Class I, Division 2 approved for hazardous area installation (UL, CUL and CSA approved)
- Temperature Range: -40°C to +70°C
- Easy to use, wire in - wire out, no setup or programming
- Range: 600 - 1000 ft in plant, no line of sight

RoHS Compliant

MOUSER STOCK NO.	Phoenix Type	Fig.	Description	Price Each
651-2867102	RAD-ISM-900-SET-UD-ANT	B	24V DC set with one 4-20mA and 2 discrete signals. DIN rail mount	
651-2867021	RAD-ISM-900-SET-AC-UD	C	110-240V AC set with one 4-20mA and 2 discrete signals. Weatherproof NEMA 4X conduit mount transmitter, DIN rail mount receiver.	
651-2867034	RAD-ISM-900-SET-DC-UD	C	12-30V DC set for one 4-20mA and 2 discrete signals. Weatherproof NEMA 4X conduit mount transmitter, DIN rail mount receiver.	
651-2867047	RAD-ISM-900-RX	-	Spare Receiver to expand point to multipoint connections. DIN Rail mount	

900MHZ TWO-WAY WIRELESS SYSTEMS WITH EXPANDABLE I/O OPTIONS

Besides duplex operation, the bi-directional radio system offers the possibility of lining up additional moudules for recording and outputting analog and digital signals. This unique design gives the user flexibility to add on multiple channels of I/O to the pared transceivers in combinations. They are ideal for moving numerous signals within high interference environments without costly cable and conduit runs. The sets include a receiver, transmitter, and antennas with connecting cable.

Features:
- 1 watt transmit power
- Interference free - Frequency Hopping Spread Sprectrum technology
- Licence free 902 - 928MHz Industrial, Scientific, and Medical (ISM) band
- Range: 600 - 1000 ft in plant, no line of sight
- Class I, Division 2 approved for hazardous area installation (UL, CUL and CSA approved)
- Up to 8 expandable I/O modules per transceiver on common power
- Max 33 analog or 66 discrete signals in one direction
- Dry contact LINK diagnostic output
- Temperature Range: -40°C to +70°C

RoHS Compliant

MOUSER STOCK NO.	Phoenix Type	Fig.	Description	Price Each
651-2867270	RAD-ISM-900-SET-BD-BUS-ANT	B	9-30V DC set with one 4-20mA in/out and 2 discrete signals in/out with bus connection for power and communicatrion. DIN Rail mount.	
651-2867092	RAD-ISM-900-BD-BUS	–	Device can be configured as a spare or as a repeater for long distance or heavily obstructed applications (requires HOPKEY for configuration)	
I/O Modules				
651-2867115	RAD-IN-4A-I	D	4 channel analog input module, 4mA - 20mA	
651-2867128	RAD-OUT-4A-I	D	4 channel analog output module, 4mA - 20mA	
651-2867144	RAD-IN-8D	D	8 channel digitial input module, 5-36V AC/DC	
651-2867157	RAD-OUT-8D-REL	D	8 channel digital output module with relay, 120V AC, 5A rated contacts	

2.4 GHZ POINT TO MULTIPOINT BLUETOOTH WIRELESS DATA PSI BLUETOOTH CONVERTER

The PSI Bluetooth converter provides a quick and easy wireless connection between serial interfaces of RS-232, RS-422, and RS-485 2-wire standard. Data connections can be established to third party devices or the PSI Bluetooth RS-232 adapter. This module has been specifically designed to meet the requirements of industrial enviornments and supports operation without software drivers thanks to its full integrated protocol stacks.

Features:
- Din Rail Mount
- Supply of 24V DA or AC
- Transmission speeds of up to 187.5kbps
- Integrated Bluetooth path diagnostics
- Class I, Division 2 approved for hazardous area installation (UL, CUL and CSA approved)
- Can be set to V.24(RS-232), RS-422, or RS-485
- Supports all popular 10/11-bit UART data formats
- Bluetooth access protected by password, fixed device pairing or device access list
- Scalable transmission power (-28dBm - +20dBm)

RoHS Compliant

MOUSER STOCK NO.	Phoenix Type	Fig.	Description	Price Each
651-2708517	PSI-WL-RS232-RS485/BT	E	Bluetooth converter for wireless RS 232, RS 422, & RS 485, MCX connection for external antenna	

FL COM SERVER - SERIAL RS-232 DEVICE SERVER FOR 10/100BASE-T(X)

The FL COM SERVER converts a serial RS-232 interface to Ethernet. It allows easy integration of RS-232 devices into 10/100Base-T(X) networks.

Features:
- Supports all common Network Protocols
- Diagnostic display
- Integrated surge voltage protection
- 10/100 Base T(X) Auto Detect
- Din Rail Mount
- 22.5 Housing width

RoHS Compliant

MOUSER STOCK NO.	Phoenix Type	Fig.	Description	Price Each
651-2744490	FL COM SERVER RS232	F	Interface module to convert RS-232 to ethernet.	

A

B

C

D

E

F

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QUATECH Wireless Device Servers and Modules

QUATECH

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AIRBORNE™ EMBEDDED WIRELESS MODULES, RADIOS AND DEVELOPMENT KITS

Quatech's New Airborne™ Enterprise Class Products are the first in the industry to provide WPA2-Enterprise Class Extensible Authentication Protocols (EAP) with support for authentication Certificates. The module provides Wireless Serial Device Server or Ethernet-to-Wireless Bridge functionality and is designed to meet extended operating temperature range (-40°C to +85°C).

Airborne™ Evaluation and Design Kits

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Quatech Part No.	Description	Price Each
Airborne™ Enterprise Evaluation Kits			
600-WLNG-EK-DP501	WLNG-EK-DP501	Digital UART interface (RS-232/422/485) to 802.11b/g Serial Modules	
600-WLNG-EK-DP502	WLNG-EK-DP502	SPI to 802.11b/g Device Server Modules	
600-WLNG-EK-DP503	WLNG-EK-DP503	Ethernet to 802.11b/g Serial Modules	
Airborne™ Evaluation Kits			
600-WLNG-EK-DP003	WLNG-EK-DP003	802.11b/g UART & SPI Modules (does not include support for WPA-2 Enterprise)	
600-ABEG-ET-DP104	ABEG-ET-DP104	802.11b/g Ethernet Bridge Module (does not include support for WPA-2 Enterprise)	
Airborne™ Radios Evaluation Kits			
600-WLEG-RA-DP101	WLEG-RA-DP101	802.11b/g Wireless CF Radio Module	

Enterprise Class Product

Airborne™ Embedded Modules and Radios

For quantities of 50 and up, call for quote.

MOUSER STOCK NO.	Quatech Part No.	Description	Price Each	
			1	25
Airborne™ Enterprise Class Embedded Wireless Device Servers & Ethernet Bridge Modules				
600-WLNG-AN-DP501	WLNG-AN-DP501	Wireless Device Server, UART to 802.11b/g Serial Module with WPA2-Enterprise Security Support		
600-WLNG-SE-DP501	WLNG-SE-DP501	Wireless Device Server, UART, RS-232/422/485 to 802.11b/g Serial Module with WPA2-Enterprise Security Support		
600-WLNG-ET-DP501	WLNG-ET-DP501	Wireless Ethernet Bridge, Ethernet to 802.11b/g Module with WPA2-Enterprise Security Support		
600-WLNG-SP-DP501	WLNG-SP-DP501	Wireless Ethernet Bridge, SPI to 802.11b/g Module with WPA2-Enterprise Security Support		
Airborne™ Embedded Wireless Device Servers & Ethernet Bridge Modules				
600-WLNG-AN-DP-101	WLNG-AN-DP101	Wireless Device Server, Universal Interface (UART, RS-232, Analog, Digital) to 802.11b/g Serial Module		
600-WLNG-AN-DP102	WLNG-AN-DP102	Wireless Device Server, SPI Interface to 802.11b/g Serial Module		
600-WLNG-ET-DP101	WLNG-ET-DP101	Wireless Ethernet Bridge, Ethernet to 802.11b/g Module		
Airborne™ Embedded Radio Modules				
600-WLRG-RA-DP101	WLRG-RA-DP101	802.11b/g Wireless CF Radio Module		

AIRBORNE™ ENTERPRISE EXTERNAL WIRELESS DEVICE SERVERS AND ETHERNET BRIDGES

Airborne™ is a family of fully integrated 802.11b/g wireless LAN bridge and device server products designed specifically to provide wireless LAN and Internet connectivity to industrial, scientific, medical and automotive applications. Convenient features include compact form factor, low power consumption and advanced security including LEAP, WPA, WPA2 and WEP standard encryption.

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Quatech Part No.	Description	Price Each	
			1	25
600-ABDG-SE-DP501	ABDG-SE-DP501	1 Port RS-232/422/485 (DB-9) to 802.11b/g with WPA2-Enterprise Security Support		
600-ABDG-SE-DP504	ABDG-SE-DP504	1 Port RS-232 (DB-9) to 802.11b/g with WPA2-Enterprise Security Support		
600-ABDG-SE-DP507	ABDG-SE-DP507	1 Port RS-232 (DB-9) to 802.11b/g Power Over Serial with WPA2-Enterprise Security Support		
600-ABDG-SE-DP101	ABDG-SE-DP101	1 Port RS-232/422/485 (DB-9) to 802.11b/g		
600-ABDG-SE-DP104	ABDG-SE-DP104	1 Port RS-232 (DB-9) to 802.11b/g		
Airborne™ Enterprise External Ethernet Bridges				
600-ABDG-ET-DP501	ABDG-ET-DP501	Ethernet to 802.11b/g with WPA2-Enterprise Security Support		
600-ABDG-ET-DP101	ABDG-ET-DP101	Ethernet to 802.11b/g		

Enterprise Class External Products

AIRBORNE™ 802.11 EMBEDDED BOARDS

The Airborne Enterprise Wireless Device Server Boards create a connection between an 802.11b/g wireless LAN and a device with a serial port. The Device Server Boards are all single-port units available with one RS-232 port or one RS-232/422/485 port. The Airborne Ethernet Bridge Boards create a connection between an 802.11 wireless LAN and a device with an Ethernet port. The Device Server and Ethernet Bridge Boards do not include enclosure, cable, external power and antenna.

For quantities of 10 and up, call for quote.

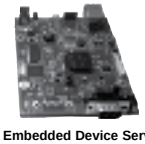
MOUSER STOCK NO.	Quatech Part No.	Description	Price Each	
			1	25
Airborne™ Embedded Wireless Device Server Boards				
600-ABDG-SE-DP503	ABDG-SE-DP503	1 Port RS-232/422/485 (DB-9) to 802.11b/g with WPA2-Enterprise Security Support		
600-ABDG-SE-DP506	ABDG-SE-DP506	1 Port RS-232 (DB-9) to 802.11b/g with WPA2-Enterprise Security Support		
600-ABDG-SE-DP106	ABDG-SE-DP106	1 Port RS-232 (DB-9) to 802.11b/g		
Airborne™ Embedded Wireless Ethernet Bridge Boards				
600-ABDG-ET-DP503	ABDG-ET-DP503	Ethernet to 802.11b/g with WPA2-Enterprise Security Support		
600-ABDG-ET-DP103	ABDG-ET-DP103	Ethernet to 802.11b/g		

SERIAL DEVICE SERVERS

Easy to install and configure, they support wired and secure 802.11 wireless networking applications and are available w/ one to eight serial ports.

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Quatech Part No.	Description	Price Each	
			1	10
600-SSE-400D	SSE-400D	Device Server, 1 port RS-232/422/485 (DB-9)		
600-DSE-100D-EMB	DSE-100D-EMB	Embedded Device Server, 2 port RS-232 (DB-9)		



Embedded Device Server

USB 2.0 SERIAL ADAPTERS

Quatech USB Adapters are reliable solutions for a wide variety of commercial uses. Moving beyond the desktop, USB offers a universal solution for device connectivity. Quatech's wide range of USB adapters feature High Speed USB 2.0 and data rates up to 921.6 kbps.

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Quatech Part No.	Description	Price Each	
			1	10
600-QSU2-100	QSU2-100	USB 2.0 Serial Adapter, 4 port RS-232		
600-ESU2-100-EMB	ESU2-100-EMB	Embedded USB 2.0 Serial Adapter, 8 port RS-232, surge suppression		

ACCESSORIES

For quantities of 25 and up, call for quote.

600-ACH0-CA-DP004	ACH0-CA-DP004	Adapter Cable, RP-SMA (Jack) to U.FL (Plug), 100mm, Indoor/Outdoor		
600-ACH2-AT-DP002	ACH2-AT-DP002	2DbI Portable (Rubber duck) (RP-SMA) Antenna		
600-ACH2-AT-DP003	ACH2-AT-DP003	5DbI Portable (Rubber duck) (RP-SMA) Antenna		
600-ACH2-AT-DP004	ACH2-AT-DP004	5DbI Portable (Rubber duck), Flying Lead (U.FL) Antenna		
600-ACH2-AT-DP011	ACH2-AT-DP011	5dBi Magnetic mount vehicle, Indoor / Outdoor Antenna		

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RADIOTRONIX Embedded Wireless Modules

RADIOTRONIX™ life without wires

Products may be RoHS compliant. Check mouser.com for RoHS status.

WI.232™ 868-870 & 902-928MHZ FREQUENCIES (EUROPE/NORTH AMERICA/BRAZIL)

Radiotronix designs, manufactures, and markets embedded wireless modules for the rapidly growing low-power wireless market. Radiotronix has two core module development platforms: Wi.232™ embedded radio modules in 868MHz, 915MHz, and 2.4GHz frequencies and their remote control transmitter and receiver modules in 315MHz, 418MHz, and 433MHz frequencies. Their products are designed to simplify RF design.

The Wi.232 Radio Module Development Platforms provide customers easy SERIAL UART radio solutions that interface to any host microcontroller.

RoHS Compliant

Common Specifications:

- Baud Rate: 2400-115200

Wi.232DTS™ Family 900MHz (N.America 902-928MHz) (Brazil 902-907.5 - 915-928MHz)

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Radiotronix Part Number	Vcc	Mod Type	Description	Region	Price Each 1	Price Each 10	Price Each 25
509-RK-WI232DTSFCC-R	RK-WI.232DTS-FCC-R	4 - 15 VDC	FSK/DTS	Wi.232DTS-FCC-R™ DEV KIT	N. America		-	-
509-WI232DTS-EVM-R	Wi.232DTS-EVM-R	3.6 - 12 VDC	FSK/DTS	Wi.232DTS-R™ Evaluation Module	N. America			
509-WI232DTS-FCC-STR	Wi.232DTS-FCC-ST-R	4 - 15 VDC	FSK/DTS	FCC Certified Radio Modl, Straight RPSMA	N. America			
509-WI232DTS-R	Wi.232DTS-R	2.7 - 3.6 VDC	FSK/DTS	Radio Modl/MCU, Transparent UART to RF DTS SW protocol	N. America			
509-232DTSB-EVM-RA-R	Wi.232DTSB-EVM-RA-R	4 - 15 VDC	FSK/DTS	Radio Modl/MCU, Transparent UART to RF DTS SW protocol, R-Angle RPSMA	Brazil			
509-232DTSB-R	Wi.232DTSB-R	2.7 - 3.6 VDC	FSK/DTS	Radio Modl/MCU, Transparent UART to RF DTS SW protocol, R-Angle RPSMA	Brazil			

RoHS Compliant

Wi.232EUR™ Family 868MHz (Europe 868-870MHz)

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Radiotronix Part Number	Vcc	Mod Type	Description	Region	Price Each 1	Price Each 10	Price Each 25
509-WI232EUR-RS	Wi.232EUR-R	2.7 - 3.6 VDC	FSK/DTS	Radio Modl/MCU, Transparent UART to RF DTS SW protocol	Europe			
509-RK-WI.232EUR-R	RK-WI.232EUR-R	2.7 - 3.6 VDC	FSK/DTS	Radio Modl/MCU, Transparent UART to RF DTS SW protocol	Europe		-	-

RoHS Compliant

Wi.232FHSS-25-R™ Family (N.America 902-928MHz)

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Radiotronix Part Number	Vcc	Mod Type	Description	Region	Price Each 1	Price Each 10	Price Each 25
509-RK-232FHSSFCC25R	RK-Wi.232FHSS-25-FCC-R	4 - 15 VDC	FSK/FHSS	Development Kit for Wi.232FHSS-25-FCC-R™	N. America		-	-
509-WI232FHSS25RRA	Wi.232FHSS-25-FCC-RA-R	4 - 15 VDC	FSK/FHSS	FCC Certified Radio Modl for Wi.232FHSS-25-R™, R-Angle RPSMA	N. America			
509-WI232FHSS-25-R	Wi.232FHSS-25-R	2.7 - 3.6 VDC	FHSS/FSK	Radio Modl/MCU, 25mW, Transparent UART to RF FHSS Protocol	N. America			

RoHS Compliant

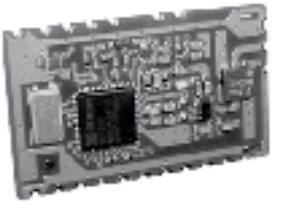
Wi.232FHSS-250-R™ Family (N.America 902-928MHz)

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Radiotronix Part Number	Vcc	Mod Type	Description	Region	Price Each 1	Price Each 10	Price Each 25
509-RK-WIFHSS250-FCC	RK-Wi.232FHSS-250-FCC-R	4 - 15 VDC	FSK/FHSS	Wi.232FHSS-250-FCC-R™ DEV KIT	N. America		-	-
509-WI.232FHSS-250-R	WI.232FHSS-250-R	2.7 - 3.6 VDC	FHSS/FSK	Radio Modl/MCU, 250mW PA, Transparent UART to RF FHSS Protocol	N. America			
509-WI232FHS250FCRAR	Wi.232FHSS-250-FCC-RA-R	4 - 15 VDC	FSK/FHSS	FCC Certified Radio Modl for Wi.232FHSS-250-R™, R-Angle RPSMA	N. America			
509-WI232FHS250FCSTR	Wi.232FHSS-250-FCC-ST-R	4 - 15 VDC	FSK/FHSS	FCC Certified Radio Modl for Wi.232FHSS-250-R™, Straight RPSMA	N. America			
509-WI232FHSS-25-R	Wi.232FHSS-25-R	2.7 - 3.6 VDC	FHSS/FSK	Radio Modl/MCU, 25mW, Transprnt UART to RF (FHSS) Protocol	N. America			

WI.M™ FAMILY 868-870 & 902-928MHZ FREQUENCIES (EUROPE/NORTH AMERICA/BRAZIL)

The Wi.M modules are flexible radio-only solutions designed to simplify the integration of RF in most applications with any microcontroller.



RoHS Compliant

Wi.232DTS™ Family 900MHz (N.America 902-928 MHz) (Brazil 902-907.5-915-928MHz)

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Radiotronix Part Number	Vcc	Mod Type	Baud Rate	Description	Region	Price Each 1	Price Each 10	Price Each 25
Transceivers									
509-WIM868X-RS	Wi.M868X-R	2.4 - 3.6 VDC	FSK/DTS	1200 - 152340	Embedded Transceiver Radio-only Modl, Microcontroller-less	Europe			
509-WIM900X-R	Wi.M900X-R	2.4 - 3.6 VDC	FSK/DTS	1200 - 152340	Embedded Transceiver Radio-only Modl, Microcontroller-less	N. America			

WI.DP1203/1205™ FAMILY 433-435, 868-870 & 902-928MHZ FREQUENCIES (EUROPE/NORTH AMERICA/BRAZIL)

The Wi.DP modules are flexible radio-only solutions designed to simplify the integration of RF in most applications with any microcontroller.
These modules aredirect drop-in replacements to all Semtech DP modules.

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	Radiotronix Part Number	Vcc	Mod Type	Baud Rate	Description	Region	Price Each 1	Price Each 10	Price Each 25
509-WI.DP1203-433-R	Wi.DP1203-433-R	2.4 - 3.6 VDC	FSK/DTS	1200 - 152340	Transceiver Radio-only Modl, Microcontroller-less,(no shield)	Worldwide			
509-WI.DP1203-868-R	Wi.DP1203-868-R	2.4 - 3.6 VDC	FSK/DTS	1200 - 152340	Transceiver Radio-only Modl, Microcontroller-less,(no shield)	Europe			
509-WI.DP1203-915-R	Wi.DP1203-915-R	2.4 - 3.6 VDC	FSK/DTS	1200 - 152340	Transceiver Radio-only Modl, Microcontroller-less,(no shield)	N. America			
509-WI.DP1205-433-R	Wi.DP1205-433-R	2.4 - 3.6 VDC	FSK/DTS	1200 - 304700	Transceiver Radio-only Modl, Microcontroller-less,(no shield)	Worldwide			
509-WI.DP1205-868-R	Wi.DP1205-868-R	2.4 - 3.6 VDC	FSK/DTS	1200 - 304700	Transceiver Radio-only Modl, Microcontroller-less,(no shield)	Europe			

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VINCOTECH GPS Modules and Development Tools

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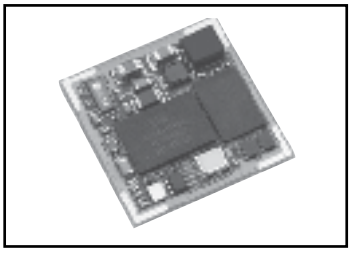
SiRF Star IV BASED MODULE: THE ANSWER TO ALL GPS CHALLENGES

The A2100 GPS modules enable fastest acquisition and tracking with the latest SiRFstarIV technology. With module versions supporting either 3.3V or 1.8V there is an appropriate solution for all telematics and power-sensitive mobile consumer application devices. SiRFstarIV chip sets, Vincotech GPS module solutions address different specific needs and combine high performance, low power consumption, and simplified integration effort. Our modules comply with the RoHS standard and are 100% electrically and functionally tested prior to packaging, thereby assuring the guarantee of the highest quality products.

NEW! TECHNOLOGY



For quantities of 100 and up, call for quote.

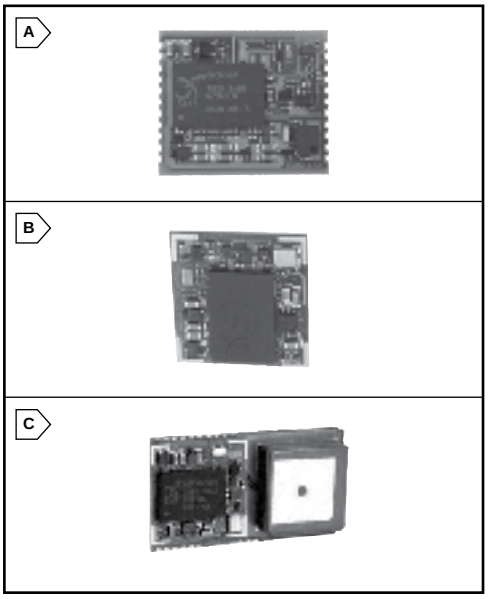
MOUSER STOCK NO.	Vincotech Part No.	Description	Price Each 1	10	50
340-V23993-A2100-A	V23993-A2100-A	A2100-A SiRFStarIV GPS recvr mod (3.3V)		-	-
340-V23993-EVA2100-A	V23993-EVA2100-A	A2100-A SiRFStarIV GPS Eval Kit			

GPS RECEIVER MODULES

With the mission of supporting our customers to implement GPS functionality into their systems, Vincotech is offering a large product portfolio to cover almost all integration possibilities in an easy way. All GPS products are manufactured in our ISO9001 and TS16949 certified factory inside the EU. Beyond that our modules follow RoHS standards and are 100% electrically and functionally tested prior to packaging.

Vincotech develops and manufactures subsystems and electronic components and offers manufacturing services geared to help customers to master complex challenges in electronics integration. Vincotech's extensive portfolio encompasses standard and tailored solutions, engineering services, and technical support for customers worldwide. The state of the art solutions are developed with the mission of identifying and intelligently communicating accurate position.

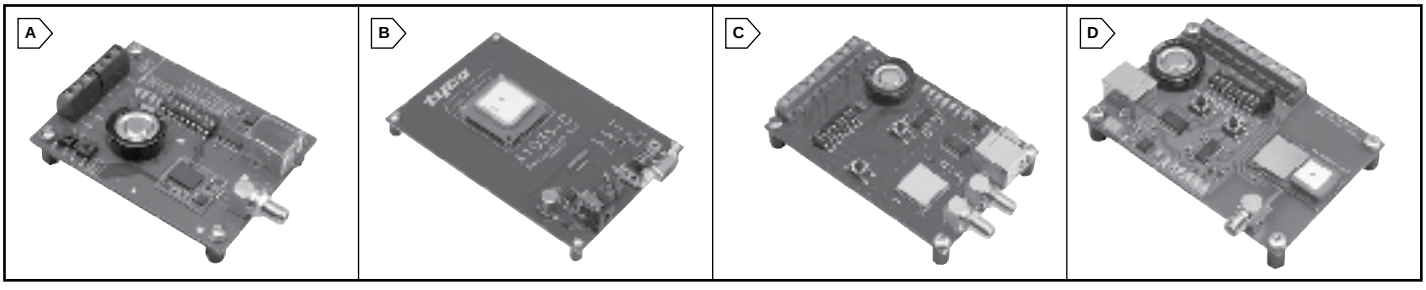
	A1035-H	A1080-A	A1080-B	A1082-A	A1084-B
1 PPS	*	*	*	*	*
Active Antenna	*	*	*	*	*
Passive Antenna	*				*
Onboard Patch Antenna	*				
Dual Antenna Support	*				
Assisted GPS	*	*	*	*	*
Plug-in Connection					
Solderable Connection	*	*	*	*	*
Programmable Flash	*				*
Current Draw @ 1PPS - mA	26	23	23	35 (1.8V)	26
GPS/UTC Raw Data	*	*	*	*	*
Memory-free Flash (Byte)	*				*
Memory-free SRAM (Byte)		*	*	*	
ROM		*	*	*	
SBAS Support	*	*	*	*	*
TCXO	*	*	*	*	*
UART NMEA	*	*	*	*	*
Operating Temperature	-30°~+85°C	-30°~+85°C	-40°~+85°C	-30°~+85°C	-30°~+85°C



For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Vincotech Part No.	Fig.	Description	Price Each 1	10	50
340-V23993-A1080-A	V23993-A1080-A	A	GPS receiver module with SiRF Star III (SMD) reduced temperature			
340-V23993-A1080-B	V23993-A1080-B	A	GPS reciever module with SiRF Star III (SMD) full temperature			
340-V23993-A1082-A	V23993-A1082-A	-	A1082A SiRF GSCi5000 GPS module			
340-V23993-A1084-B	V23993-A1084-B	B	GPS receiver - SMD, SIRF Star III			
340-V23993-A1035-H	V23993-A1035-H	C	A1035-H GPS SMT SiRF Star III antenna module			

GPS DEMONSTRATION AND EVALUATION KITS



EVA1080-A:
The EVA1080-A is an evaluation board for the A1080-A GPS Receiver Module. It is easily installed to you PC environment via USB connections.

Each Kit contains the following:
- A1080-A module
- Active Antenna
- USB cable
- CD w/ GPS Cockpit Software

DKS1035-D:
The DKS1035-D is a demonstration kit for the A1035-D GPS Receiver Module. This kit connects to your PC environment via RS232 connections.

Each Kit contains the following:
- A1035-D module
- Active Antenna
- Serial cable
- CD w/ GPS Cockpit Software

EVA1084-A:
The best SiRFstarIII module needs the best environment. With the new EVA1084 you can not only see superior GPS performance. The evaluation kit gives you everything you need for getting in touch for the first time with GPS or for evaluating all the features of the A1084 - from dual antenna inputs to low power modes.

EVA1035-H:
Vincotech's GPS receiver module/smart antenna A1035-H is a highly intergrated GPS antenna receiver module based on the technology of the GPS receiver module A1084 and a ceramic GPS patch antenna.

MOUSER STOCK NO.	Vincotech Part No.	Fig.	Description	Price Each
340-V23993-EVA1080-A	V23993-EVA1080-A	A	GPS demonstration / evaluation kit for A1080-A module	
340-V23993-DKS1035-D	V23993-DKS1035-D	B	GPS demonstration kit for A1035-D module	
340-V23993-USB1082A	V23993-USB1082A	-	A1082A GPS USB demo kit	
340-V23993-DKS1035-C	V23993-EVA1035-C	-	GPS demo kit for A1035-C module	
340-V23993-EVA1037-A	V23993-EVA1037-A	-	GPS demo/evaluation kit for A1037-A module	
340-V23993-EVA1084-A	V23993-EVA1084-A	C	Evaluation kit - GPS module A1084-A/B	
340-V23993-EVA1035-H	V23993-EVA1035-H	D	A1035-H GPS evaluation kit	

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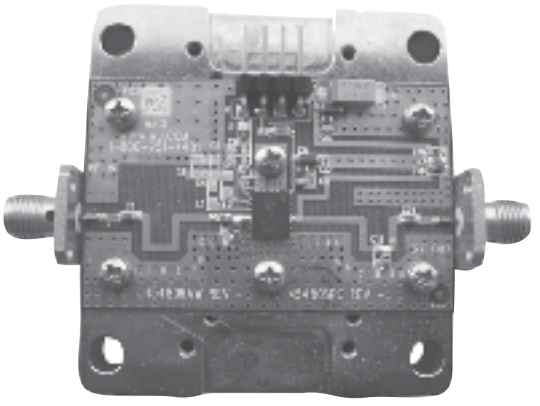
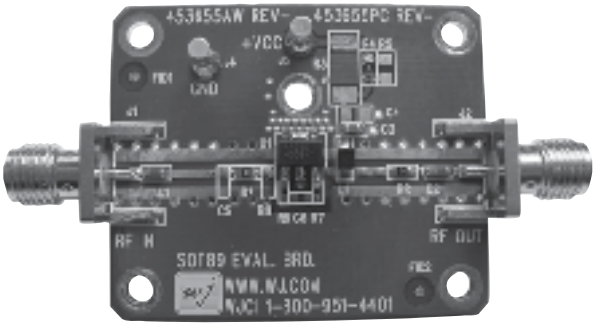
TRIQUINT SEMICONDUCTOR Evaluation Boards

RoHS Compliant **This product is RoHS compliant.**

WJ Communications, Inc. is a leading provider of (RF) solutions serving multiple markets targeting wireless communications, RF identification (RFID), broadband cable, defense, and homeland security. WJ addresses the RF challenges in these multiple markets with its highly reliable amplifiers, mixers, RF integrated circuits (RFICs), RFID reader modules, chipsets, and multi-chip (MCM) modules.



AP601-PCB1960



WJA1030-PCB

RoHS Compliant

RoHS Compliant

MOUSER STOCK NO.	TriQuint Part No.	Description	Price Per Board
772-AG102-PCB	AG102-PCB	AG102 800-2600MHz Eval Brd	
772-AG203-63PCB	AG203-63PCB	AG203-63 700-2400MHz Eval Brd	
772-AG302-63PCB	AG302-63PCB	AG302-63 700-2400MHz Eval Brd	
772-AG302-86PCB	AG302-86PCB	AG302-86 700-2400MHz Eval Brd	
772-AG303-63PCB	AG303-63PCB	AG303-63 700-2400MHz Eval Brd	
772-AG303-86PCB	AG303-86PCB	AG303-86 700-2400MHz Eval Brd	
772-AG403-89PCB	AG403-89PCB	AG403-89 700-2400MHz Eval Brd	
772-AG602-89PCB	AG602-89PCB	AG602-89 700-2400MHz Eval Brd	
772-AG603-89PCB	AG603-89PCB	AG603-89 700-2400MHz Eval Brd	
772-AG604-86PCB	AG604-86PCB	AG604-86 700-2400MHz Eval Brd	
772-AG604-89PCB	AG604-89PCB	AG604-89 700-2400MHz Eval Brd	
772-AH101-PCB	AH101-PCB	AH101 50-1500MHz Eval Brd	
772-AH102A-PCB2000	AH102A-PCB2000	AH102A 1700-2200MHz Eval Brd	
772-AH102A-PCB900	AH102A-PCB900	AH102A 900MHz Eval Brd	
772-AH103A-PCB1900	AH103A-PCB1900	AH103A 1900MHz Eval Brd	
772-AH103A-PCB2140	AH103A-PCB2140	AH103A 2140MHz Eval Brd	
772-AH103A-PCB900	AH103A-PCB900	AH103A 900MHz Eval Brd	
772-AH110-89PCB1900	AH110-89PCB1900	AH110 1900MHz Eval Brd	
772-AH114-89PCB1900	AH114-89PCB1900	AH114 1900MHz Eval Brd	
772-AH114-89PCB2140	AH114-89PCB2140	AH114 2140MHz Eval Brd	
772-AH114-89PCB900	AH114-89PCB900	AH114 900MHz Eval Brd	
772-AH118-89PCB1900	AH118-89PCB1900	AH118 1900MHz Eval Brd	
772-AH118-89PCB2140	AH118-89PCB2140	AH118 2140MHz Eval Brd	
772-AH118-89PCB900	AH118-89PCB900	AH118 900MHz Eval Brd	
772-AH11BAL-PCB	AH11BAL-PCB	AH11 600-2100MHz Balanced Eval Brd	
772-AH11PP1900-PCB	AH11PP1900-PCB	AH11 1900MHz Push-Pull Eval Brd	
772-AH11PP900-PCB	AH11PP900-PCB	AH11 900MHz Push-Pull Eval Brd	
772-AH1-PCB	AH1-PCB	AH1 800-2500MHz Eval Brd	
772-AH202-PCB1900	AH202-PCB1900	AH202 1900 MHz Eval Brd	
772-AH202-PCB2140	AH202-PCB2140	AH202 2140 MHz Eval Brd	
772-AH202-PCB900	AH202-PCB900	AH202 900 MHz Eval Brd	
772-AH212-S8PCB1960	AH212-S8PCB1960	AH212-S8 1960MHz Eval Brd	
772-AH212-S8PCB2140	AH212-S8PCB2140	AH212-S8 2140MHz Eval Brd	
772-AH215-S8PCB1960	AH215-S8PCB1960	AH215 1960MHz Eval Brd	
772-AH215-S8PCB2140	AH215-S8PCB2140	AH215 2140MHz Eval Brd	
772-AH215-S8PCB900	AH215-S8PCB900	AH215 900MHz Eval Brd	
772-AH22S-PCB	AH22S-PCB	AH22S CATV Push-Pull Eval Brd	
772-AH2-PCB	AH2-PCB	AH2 50-860MHz CATV Eval Brd	
772-AH312-S8PCB1960	AH312-S8PCB1960	AH312 1960MHz Eval Brd	
772-AH312-S8PCB2140	AH312-S8PCB2140	AH312 2140MHz Eval Brd	
772-AH312-S8PCB900	AH312-S8PCB900	AH312 900MHz Eval Brd	
772-AH31-PCB170	AH31-PCB170	AH31 155-185MHz Eval Brd	
772-AH31-PCB240	AH31-PCB240	AH31 220-260MHz Eval Brd	
772-AH31-PCB500	AH31-PCB500	AH31 450-550MHz Eval Brd	
772-AH31-PCB75	AH31-PCB75	AH31 65-85MHz Eval Brd	
772-ML483-PCB	ML483-PCB	ML483 .7GHz to 1GHz Eval Bd	
772-TQP8M9013PCB900	TQP8M9013-PCB900	TQP8M9013 850-900MHz Eval Brd	
772-TQP8M9013PCB2140	TQP8M9013-PCB2140	TQP8M9013 3.11-2.17GHz Eval Brd	

MOUSER STOCK NO.	TriQuint Part No.	Description	Price Per Board
772-TQP4M9071PCB-IF	TQP4M9071-PCB-IF	TQP4M9071 40MHz to 500MHz Eval Brd	
772-TQP4M9071PCB-RF	TQP4M9071-PCB-RF	TQP4M9071 .7Ghz to 3.5GHz Eval Brd	
772-AH3WB-PCB	AH3WB-PCB	AH3 50-870MHz Eval Brd	
772-AH314-PCB	AH314-PCB	AH314 2.4-2.7GHz Eval Brd	
772-AH315-PCB	AH315-PCB	AH315 3.3-3.7GHz Eval Brd	
772-AM1-PCB	AM1-PCB	AM1 800-2600MHz Eval Brd	
772-AP561-PCB2500	AP561-PCB2500	AP561 2.4-2.7GHz Eval Brd	
772-AP562-PCB	AP562-PCB	AP562 3.3-3.8GHz Eval Brd	
772-AP601-PCB900	AP601-PCB900	AP601 869-960MHz Eval Brd	
772-AP601-PCB1960	AP601-PCB1960	AP601 1930-1990MHz Eval Brd	
772-AP601-PCB2140	AP601-PCB2140	AP601 2110-2170MHz Eval Brd	
772-AP602-PCB900	AP602-PCB900	AP602 869-960MHz Eval Brd	
772-AP602-PCB1960	AP602-PCB1960	AP602 1930-1990MHz Eval Brd	
772-AP602-PCB2140	AP602-PCB2140	AP602 2110-2170MHz Eval Brd	
772-AP603-PCB900	AP603-PCB900	AP603 869-960MHz Eval Brd	
772-AP603-PCB1960	AP603-PCB1960	AP603 1930-1990MHz Eval Brd	
772-AP603-PCB2140	AP603-PCB2140	AP603 2110-2170MHz Eval Brd	
772-EC1078B-PCB	EC1078B-PCB	EC1078B 700-2400MHz Eval Brd	
772-ECG001B-PCB	ECG001B-PCB	ECG001B 700-2400MHz Eval Brd	
772-ECG001F-PCB	ECG001F-PCB	ECG001F 700-2400MHz Eval Brd	
772-ECG003B-PCB	ECG003B-PCB	ECG003B 700-2400MHz Eval Brd	
772-ECG004B-PCB	ECG004B-PCB	ECG004B 700-2400MHz Eval Brd	
772-ECG005B-PCB	ECG005B-PCB	ECG005B 700-2400MHz Eval Brd	
772-ECG006C-PCB	ECG006C-PCB	ECG006C 700-2400MHz Eval Brd	
772-ECG006F-PCB	ECG006F-PCB	ECG006F 700-2400MHz Eval Brd	
772-ECG008B-PCB	ECG008B-PCB	ECG008B 700-2400MHz Eval Brd	
772-ECG055B-PCB	ECG055B-PCB	ECG055B 700-2400MHz Eval Brd	
772-FP1189-PCB1900S	FP1189-PCB1900S	FP1189 1900MHz Eval Brd	
772-FP1189-PCB2140S	FP1189-PCB2140S	FP1189 2140MHz Eval Brd	
772-FP1189-PCB900S	FP1189-PCB900S	FP1189 900MHz Eval Brd	
772-FP2189-PCB1900S	FP2189-PCB1900S	FP2189 1900MHz Eval Brd	
772-FP2189-PCB2140S	FP2189-PCB2140S	FP2189 2140MHz Eval Brd	
772-FP2189-PCB900S	FP2189-PCB900S	FP2189 900MHz Eval Brd	
772-FP31QF-PCB1900	FP31QF-PCB1900	FP31QF 1900MHz Eval Brd	
772-FP31QF-PCB2140	FP31QF-PCB2140	FP31QF 2140MHz Eval Brd	
772-FP31QF-PCB900	FP31QF-PCB900	FP31QF 900MHz Eval Brd	
772-WJA1005-PCB	WJA1005-PCB	WJA1005 50-1200MHz Eval Brd	
772-WJA1010-PCB	WJA1010-PCB	WJA1010 50-2300MHz Eval Brd	
772-WJA1015-PCB	WJA1015-PCB	WJA1015 50-2300MHz Eval Brd	
772-WJA1020-PCB	WJA1020-PCB	WJA1020 50-4000MHz Eval Brd	
772-WJA1025-PCB	WJA1025-PCB	WJA1025 50-4000MHz Eval Brd	
772-WJA1030-PCB	WJA1030-PCB	WJA1030 50-4000MHz Eval Brd	
772-WJA1035-PCB	WJA1035-PCB	WJA1035 50-4000MHz Eval Brd	
772-WJA1500-PCB	WJA1500-PCB	WJA1500 50-1000MHz Eval Brd	
772-WJA1505-PCB	WJA1505-PCB	WJA1505 50-1000MHz Eval Brd	
772-WJA1510-PCB	WJA1510-PCB	WJA1510 50-1000MHz Eval Brd	
772-WJA1515-PCB	WJA1515-PCB	WJA1515 50-1000MHz Eval Brd	
772-WJA1000-PCB	WJA1000-PCB	WJA1000 50-1200MHz Eval Brd	

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Energy Harvesting Modules and Kits

CYMBET™ CORPORATION ENERCHIP™ EH ENERGY HARVESTING MODULE

The EnerChip EH CBC5300 is a self-contained Energy Harvesting power module in a 24-pin DIP configuration. The CBC5300 module is designed to accept a wide range of energy transducer inputs, store the harvested power, and deliver managed power to the target system. The purpose of this module is to enable system designers to quickly develop Energy Harvesting applications.

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Cymbet Part No.	Fig.	Parasitic Load Current (Typ.)		VOUT , 2µA Load Battery charged (Typ.)	Vin Operating Voltage Range	VBAT Charging 25°C (Typical)	Battery Cutoff 4.7kΩ load (Typical)	Price Each			
			Boost Conv. Off	Boost Conv. On					1	10	25	100
722-CBC5300-24C	CBC5300-24C	A	800nA	20µA	3.55 V	0.25 - 4 V	4.06 V	3.3 V				

CYMBET™ CORPORATION EVALUATION KITS

EnerChip™ CC CBC3112 & CBC3150 Evaluation Kit

The EnerChip CC EVAL-05 Evaluation Kit is used to demonstrate the capabilities of the EnerChip Thin Film Batteries and the EnerChip CC with Integrated Battery Management capabilities.
The kit can be used to demonstrate:
1) either EnerChip battery, 2) either EnerChip CC device or
3) the EnerChip CC in parallel with the other EnerChip battery

EnerChip™ EH Solar Energy Harvester Evaluation Kit

CBC-EVAL-08 is a demonstration kit combining a solar panel energy transducer with the CBC5300 EnerChip EH module having two 50µAh EnerChip batteries connected in parallel. The EnerChips provide storage and starting power for the energy harvesting module. The purpose of this demonstration platform is to enable designers to quickly develop Energy Harvesting applications.

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Cymbet Part No.	Fig.	Description	Price Each		
				1	10	25
722-CBC-EVAL-05	CBC-EVAL-05	B	EnerChip CC Evaluation Kit			
722-CBC-EVAL-08	CBC-EVAL-08	C	EnerChip Solar Energy Harvesting Demo Kit			

TEXAS INSTRUMENTS Authorized Distributor EZ430-RF2500-SEH DEVELOPMENT TOOL

The eZ430-RF2500 is a complete wireless development tool for the MSP430 and CC2500 that includes all the hardware and software required to develop an entire wireless project with the MSP430 in a convenient USB stick. The tool includes a USB-powered emulator to program and debug your application in-system and two 2.4-GHz wireless target boards featuring the highly integrated MSP430F2274 ultra-low-power MCU.

The Texas Instruments eZ430-RF2500-SEH Development Tool featuring the Cymbet CBC-EVAL-08 EnerChip™ EH Solar Energy Harvesting Evaluation Kit helps designers create a perpetually powered wireless sensor network based on the ultra-low-power MSP430 microcontroller (MCU).

MOUSER STOCK NO.	TI Part No.	Fig.	Description	Price Each
595-EZ430-RF2500	EZ430-RF2500	-	2.4 GHZ MSP430 Wireless Development Tool	

AdaptivEnergy ENERGY HARVESTING DEMONSTRATION KITS AND MODULES

AdaptivEnergy is the leading developer and supplier of piezo-based energy harvesting DC power supplies to enable self-sustaining microelectronics. Their ruggedized, maintenance-free Joule-Thief™ products capture ambient mechanical energy and convert it to power many applications including wireless sensing, structural health monitoring, and RFID. AdaptivEnergy offers dependable power—no more wires or battery servicing—to make possible a new generation of intelligent green solutions.

Joule-Thief™ Demonstration Kits

Joule-Thief™ is a miniature vibratory energy harvesting module ideal for battery extension or replacement in wireless sensing and other low power applications. Built on AdaptivEnergy's Powered by RLP™ technology platform, this kit demonstrates battery-less wireless transmissions from a 60Hz vibratory source to a USB-based receiver.

MOUSER STOCK NO.	AdaptivEnergy Part No.	Fig.	Description	Price Each
740-TI-A-V3A3-NE03	TI-A-V3A3-NE03	-	50Hz Resonance Joule-Thief™ Energy Harvesting Demonstration Kit	
740-TI-A-V3B3-NE03	TI-A-V3B3-NE03	-	60Hz Resonance Joule-Thief™ Energy Harvesting Demonstration Kit	

Random Vibration Demonstration Kit

AdaptivEnergy's Joule-Thief™ energy harvesting power supplies convert ambient mechanical energy, such as vibration and impact events, into a standard DC voltage output. The Random Vibration Demonstration Kit includes everything you need to evaluate the JTRA-e5mini energy harvesting module within your vibration environment. This includes an example self-sustaining microelectronics application with wireless sensors and Texas Instruments' low power MSP430 Wireless Development Tool.

MOUSER STOCK NO.	AdaptivEnergy Part No.	Fig.	Description	Price Each
740-TI-A-V2E4-TA02	TI-A-V2E4-TA02	D	Random Vibration Energy Harvesting Demonstration Kit	

Joule-Thief™ Modules

Specifications:

- 50,60, or 120 Hz RLP® Smart Energy Beam™ Standard
- Capactive or Li-ion Battery Storage
- Efficient Energy Key™ Collection Electronics
- Standard 3.6V DC Voltage Output
- Easily mounted with embedded magnets or fastners
- Energy collected is dependant on frequency and amplitude of vibration source

MOUSER STOCK NO.	AdaptivEnergy Part No.	Fig.	Description	Price Each	
				1	10
740-V3A3-NE13	V3A3-NE13	E	50Hz Resonance Joule-Thief™ Energy Harvester DC Power Supply		
740-V3B3-NE13	V3B3-NE13	E	60Hz Resonance Joule-Thief™ Energy Harvester DC Power Supply		

Random Vibration Joule-Thief™ & Transport Energy Harvesting Unit

AdaptivEnergy's Joule-Thief™ energy harvesting power supplies convert ambient mechanical energy, such as vibration and impact events, into a standard DC voltage output. The JTRA-e5mini Random Vibration Joule-Thief™ module is an ideal solution for self-sustaining low power microelectronics such as wireless sensing and active RFID. Joule-Thief™'s stress-engineered Smart Energy Beam™ produces more power per unit volume than any other piezo-based energy harvesting technology available. AdaptivEnergy's highly efficient Energy Key™ electronics are integrated into the Random Vibration module, resulting in a very compact energy harvester with a 2-wire interface to your application.

MOUSER STOCK NO.	AdaptivEnergy Part No.	Fig.	Description	Price Each	
				1	10
740-V2E4-TA02	V2E4-TA02	F	Random Vibration Joule-Thief™ Energy Harvester DC Power Supply		
740-V3E3-NE03	V3E3-NE03	G	Ground Transport Energy Harvester		-

A

B

C

D

E

F

G

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DLP DESIGN USB Interface Products

Products may be RoHS compliant.
Check mouser.com for RoHS status.

"Add USB to your next project--it's easier than you might think!"

DLP Design's USB Interface products provide a high-speed, hot-swappable, user-friendly connection between your electronic device and a host PC. The USB interface will provide up to 500mA at 5 volts of power for your electronics. These boards make the extremely complex USB Interface easy for just about anyone to start using, without requiring any in-depth prior knowledge.

DUAL CHANNEL USB ADAPTERS

626-DLP2232M-G

The DLP-2232M uses FTDI's FT2232C 3RD generation Dual Channel USB-FIFO/UART and offers a simple solution for interfacing ASIC/MCU/FPGA/DSP based designs to a host computer via USB. Each channel can be configured for either USB-UART or USB-FIFO via the on-board setup EEPROM. Rev 3 silicon from FTDI. No in-depth knowledge of USB required!

626-DLP2232ML-G

Same functional design as the DLP-2232M, the DLP-2232ML is perfect for space constrained designs.

- Dual channel, each can be configured for USB-FIFO or USB-UART
- Up to 8 megabit per second data rate
- USB 1.1/2.0 Compatible

626-DLP2232PB-G / 626-DLP2232PB-CCS

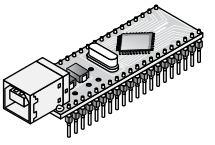
The DLP-2232PB uses FTDI's 3RD generation FT2232C USB IC and a PIC Microchip 16F877A to form a rapid prototyping development tool. On-board firmware uploader included - no device programmer required!

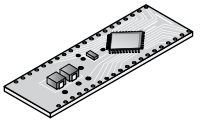
626-DLP-USB232R

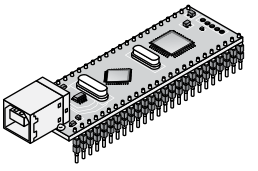
The DLP-USB232R is DLP Design's smallest USB-to-serial UART interface module, and it utilizes the popular FT232R IC with the FTDIChip-ID™ feature from FTDI. In addition to enabling standard USB-to-serial designs, both asynchronous and synchronous bit-bang interface modes are available.

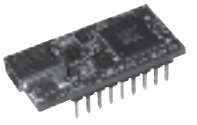
626-DLP-USB1232H

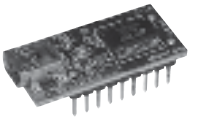
The DLP-USB1232H is DLP Design's premier USB-to-UART/FIFO interface module based upon FTDI's fifth-generation USB 2.0 High Speed (480Mb/s) silicon. The DLP-USB1232H is available in a lead-free, RoHS-compliant, compact, 18-pin, 0.1-inch spaced standard DIP footprint.


626-DLP2232M-G


626-DLP2232ML-G


626-DLP2232PB-G


626-DLP-USB1232H


626-DLP-USB232R

RoHS Compliant

Embedded Modules

For quantities of 250 and up, call for quote.

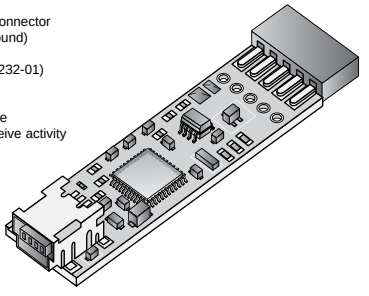
MOUSER STOCK NO.	DLP Part No.	Price Each			
		1	10	50	100
626-DLP2232M-G	DLP-2232M-G				
626-DLP2232ML-G	DLP-2232ML-G				
626-DLP-2232PB-G	DLP-2232PB-G				
626-DLP-USB1232H	DLP-USB1232H				
626-DLP-USB232R	DLP-USB232R				

USB TO SERIAL ADAPTER

This USB-to-serial adapter is designed to easily connect a microcontroller/DSP/FPGA/etc to a host PC or upgrade a legacy RS232 device to USB with minimal design effort. Virtual Com Port (VCP) drivers are provided royalty-free that make the DLP-TXRX look like a standard Windows/Linux/Mac RS232 port to the users host program. An attractive quantity discount structure makes this module suitable for incorporation into low- and medium-volume finished products.

Features:

- Connection to host PC/Mac made via mini USB connector
- As few as 2 wire serial interface (RX, TX and ground)
- Standard baud rates from 300 to 921,600 baud
- Support for non-standard baud rates (ApNote AN232-01)
- Open-collector output available for resetting microcontroller under software control (DTR)
- Input provided for user-selectable interface voltage
- Red and green LEDs to indicate transmit and receive activity



RoHS Compliant

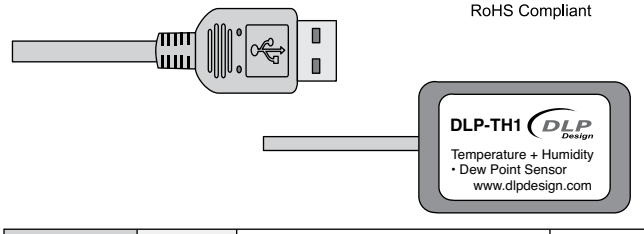
For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Price Each	
		1	100
626-DLP-TXRX-G	DLP-TXRX-G		

DLP-TH1 TEMPERATURE AND HUMIDITY SENSOR

The DLP-TH1 is shipped with Windows 98/ME/2000/XP compatible software and USB drivers. Additionally, the most recent versions of the application software and USB drivers for the DLP-TH1 are available as a free download from www.dlpdesign.com/usb/th1.html.

RoHS Compliant



MOUSER STOCK NO.	DLP Part No.	Description	Price Each		
			1	25	100
626-DLP-TH1B	DLP-TH1-B	Temperature and Humidity Sensor			

DLP-D USB BASED SECURITY DONGLE

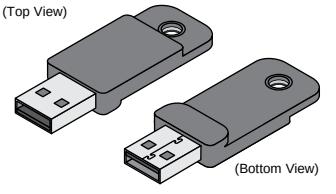
The DLP-D Security Dongle is pre-programmed with a unique identification number (Serial Number) that is readable over USB but cannot be altered by any means. Since each serial number is unique, this device provides a way of linking application software to a specific hardware dongle with a high level of security.

Features:

- Hard-coded, unique serial number
- USB 1.1 and 2.0 compatible interface
- Small size; easily fits on key chain
- 3rd-Party support for application development

Applications:

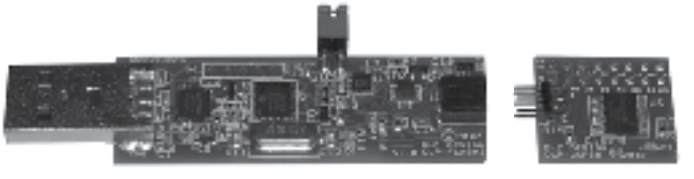
- Access control
- Copy protection



RoHS Compliant

MOUSER STOCK NO.	DLP Part No.	Description	Price Each
626-DLP-D-G	DLP-D-G	USB Security Dongle	

DLP-FLASH 2



This is a complete in-circuit debugging and programmable solution for Microchip's PIC16Fxx and PIC18Fxx PIC® MCU's. The device debugs all PIC16 and PIC18 targets that support debug mode and provides In-Circuit Serial Programming (ICSP) support for FLASH-based PIC microcontrollers. The DLP-FLASH2 is compatible with over 200 PIC MCUs and takes all its power from the host USB port so no external cables or power source is required. Compatible with the CCS PCW debugger or stand-alone ICD contol software.

Features:

- Device Programmer
- In-circuit Debugger
- CCS C Compiler for 16F88 w/IDE (2K limit)
- Detachable Taget PCB featuring a PIC16F8 Microcontroller and LED
- More than 200 PIC devices are supported by the DLP-Flash 2

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Description	Price Each
626-DLP-FLASH2	DLP-FLASH2	Pic Microcontroller Programmer Debuggers Device Prog/ Incirct Debugr W/ C Compiler	
626-DLP-UCF917	DLP-UCF917	Pic Microcontroller Programmer Debuggers Flash2 Target Board 16F917 W/Ide 2K Ltd	
626-DLP-UCF4420	DLP-UCF4420	Pic Microcontroller Programmer Debuggers Flash2 Target Board 18F4420 W/Ide 2K Ltd	
626-DLP-UCF2321	DLP-UCF2321	Pic Microcontroller Programmer Debuggers Flash2 Target Board 18F2321 W/Ide 2K Ltd	

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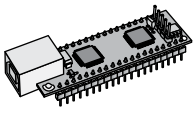
DLP DESIGN USB Interface Products

Products may be RoHS compliant.
Check mouser.com for RoHS status.

"Add USB to your next project-it's easier than you might think!"

DLP Design's USB Interface products provide a high-speed, hot-swappable, user-friendly connection between your electronic device and a host PC. The USB interface will provide up to 500mA at 5 volts of power for your electronics. These boards make the extremely complex USB Interface easy for just about anyone to start using, without requiring any in-depth prior knowledge.

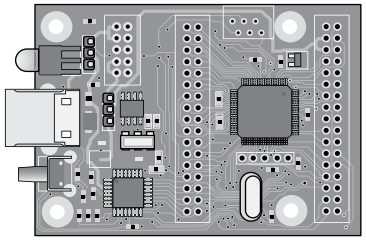
USB MICROCONTROLLER DEVELOPMENT BOARDS



DLP-245SY-G

- Simple USB-FIFO interface to Parallax SX48 microcontroller (50MHz)
- Plugs into a standard 40-pin, 0.6in wide DIP socket
- Example source code provided for Token firmware feature
- Up to 7 megabit per second data rate to host computer
- USB 1.1 compliant
- Rev 2 silicon from FTDI
- No in-depth knowledge of USB required

The DLP-245SY is a powerful integrated module based on the DLP-USB245M USB-FIFO adapter coupled with a Ubicom SX48 microcontroller and royalty free USB drivers. It plugs into a standard 40 pin 0.6in wide DIP socket and is ideal for rapid prototyping and development of USB / Ubicom based designs. Token I/O code pre-programmed into the SX48's ROM for basic port pin input/output capability including access to an external, on-board EEPROM, and external digital temperature sensors. The SX48's Flash ROM can be easily erased and reprogrammed if required using the optional DLP-Flash Programmer. Refer to the datasheet for full details.

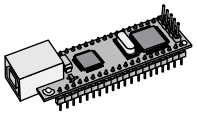


DLP-245PL-G

- Simple USB-FIFO interface to PIC Microchip 18F8722 microcontroller
- 50 I/O pins (including A/D inputs) plus 8-bit data bus
- Example source code provided for Token firmware feature
- Up to 2 megabit per second data rate to host computer
- USB 1.1/2.0 compatible
- Rev 2 silicon from FTDI
- No in-depth knowledge of USB required
- RoHS Compliant

The DLP-245PL is a powerful integrated module based on the DLP-USB245M USB-FIFO adapter coupled with a PIC 18F8722 MPU and royalty free USB drivers. The 18F8722 microcontroller is preprogrammed with basic functionality for accessing the port pins and can be reprogrammed with user hex code via a 5-pin header that is compatible with Microchip's MPLAB ICD2 device programmer/debugger (purchased separately). Refer to the datasheet for full details.

RoHS Compliant



DLP-245PB-G

- Simple USB-FIFO interface to PIC Microchip 16F877A microcontroller
- Plugs into a standard 40-pin, 0.6in wide DIP socket
- Example source code provided for Token firmware feature
- Up to 2 megabit per second data rate to host computer
- USB 1.1/2.0 Compatible
- Rev 2 silicon from FTDI
- No in-depth knowledge of USB required

The DLP-245-PB-G is a powerful integrated module based on the DLP-USB245M USB-FIFO adapter coupled with a PIC 16F877 MPU and royalty free USB drivers. It plugs into a standard 40 pin 0.6in wide DIP socket and is ideal for rapid prototyping and development of USB / PIC based designs. Token I/O code pre-programmed into the 16F877's ROM for basic port pin input/output capability including access to the A/D, EEPROM, and external digital temperature sensors. The 16F877's Flash ROM can be easily erased and reprogrammed if required using the optional DLP-Flash Programmer. Refer to the datasheet for full details.

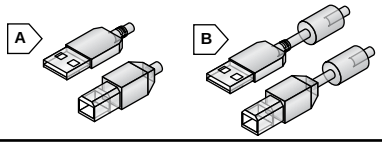
For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Description	Price Each 1	25	100
626-DLP-245SY-G	DLP-245SY -G	DLP-245SY USB/Microcontroller PCB			
626-DLP-245PL-G	DLP-245PL -G	DLP-245PL USB/Microcontroller PCB			
626-DLP-245PL-G-CCS	DLP-245PL-G-CCS	DLP-245PLA-G Module and CCS Compiler			
626-DLP-245PB-G	DLP-245PB-G	USB to PIC16F877A Microcontroller Module			
626-DLP-245PB-G-CCS	DLP-245PB-G-CCS	DLP-245PB-G Board +CCS Compiler			

USB CABLES

Features:

- UL2725 Cable
- 100% Open, short & mis-wire tested
- RoHS Compliant



For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	Fig.	Color	Length (In.)	Description	Price Each 1	10	100	500
172-1024-E	A	Black	1.8M (71)	USB A male to USB B male				
172-1027-E	B	Black	1.5M (59)	Filtered USB A male to USB B male				

USB ADAPTER BOARDS

DLP-USB245M-G

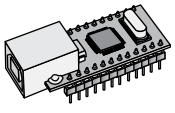
- Add USB connectivity to your next project
- Up to 8 megabit per second data rate
- USB 1.1 compliant
- Simple FIFO interface to MCU, FPGA, CPU, etc.
- Rev 2 silicon from FTDI
- No in-depth knowledge of USB required
- RoHS Compliant

RoHS Compliant

The DLP-USB245M USB-FIFO adapter offers a simple straight-forward solution for interfacing ASIC or MCU based designs to USB. It comes complete with royalty-free drivers for most common operating systems. Features include an easy to use FIFO-like interface, a data transfer rate of up to 8 megabits per second and a standard .6 inch, 24 pin DIP footprint.

DLP-USB232M-G

- Easily convert legacy RS-232 devices to USB
- Up to 3 megabaud data rate
- USB 1.1 compliant
- Full handshaking & modem interface signals
- Rev 2 silicon from FTDI
- No in-depth knowledge of USB required
- RoHS Compliant



The DLP-USB232M USB-UART Adapter PCB is the ideal solution for upgrading legacy RS232 designs to USB. It comes complete with royalty-free drivers for most common operating systems. Features include data transfer rates of up to 3 million baud, a full set of modem handshaking controls and a standard .6 inch, 24 pin DIP footprint.

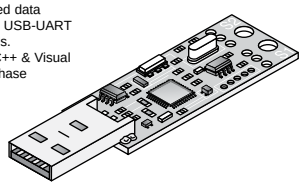
For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Description	Package	Price Each 1	25	50
626-DLP-USB245M-G	DLP-USB245M-G	DLP-USB245M USB-FIFO Adapter PCB	DIP-24			
626-DLP-USB232M-G	DLP-USB232M-G	DLP-USB232M USB-UART Adapter PCB	DIP-24			

USB DATA ACQUISITION

Schematics available on-line. USB 1.1 Compliant.
The onboard PIC12F629 microcontroller can be reprogrammed with user code (requires programmer). Drivers and test applications can be downloaded from the website

Acquire data from the world around you using these USB based data acquisition boards. Learn how to interface to FTDI's FT232BM USB-UART IC using small microcontrollers & simple RS232-like commands. Demonstration code now available upon purchase for Visual C++ & Visual Basic. Microcontroller C source code also available upon purchase



626-DLP-TEMP-G

- DLP-TEMP 2-Channel Temperature Acquisition Board
- Monitor & log digital temperature data from 1 or 2 sensors (one DS18B20 sensor included with purchase of board)
- RoHS Compliant

USB-UART & PICMicro Based Data Acquisition Board

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Price Each 1	10	50	100
626-DLP-TEMP-G	DLP-TEMP-G				

MINIATURE USB MICROCONTROLLER MODULE

Measuring in at only 1.375x0.6 inches, this new module is our lowest cost and smallest USB to Microcontroller module to date. The DLP-232PC uses single byte commands and FTDI's Virtual COM Port (VCP) drivers to provide an easy to use USB interface to a PIC 18F2410 microcontroller. Features include 14 I/O channels (8 can be used for analog inputs measuring 0-5 volts), a standard 0.3 inch wide DIP footprint and preprogrammed firmware for easy access to the I/Os and external digital temperature sensors (purchased separately).

RoHS Compliant

Miniature, Low Cost, USB to Microcontroller Module

For quantities of 50 and up, call for quote.

MOUSER STOCK NO.	DLP Part No.	Price Each 1	10	25
626-DLP-232PC	DLP-232PC			

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FTDI UART Chips and Vinculum Host Controllers

RoHS Compliant **This product is RoHS compliant.**

FTDI VINCULUM AND VINCULUM II USB HOST CONTROLLER DEVICES

FTDI VNC2 USB Host Controller IC

Vinculum-II (VNC2) is the second generation of FTDI's Vinculum family of dual USB Host Controllers. VNC2 expands on the abilities of the VNC1L devices with more memory and a faster processor. The VNC2 features a powerful 16-bit MCU core, with embedded 256KB Flash and 16KB RAM memory. The device supports a range of flexible interfaces including UART, SPI, FIFO and PWM. The complete USB protocol data processing is handled entirely by hardware resources within the device freeing up processing resources for user developed applications.

PRODUCT NEW

RoHS Compliant

Vinculum

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	FTDI Chip Part No.	Description	Price Each 1	10	50	100
895-VNC1L-1A	VNC1L-1A	48 Pin LQFP				

Vinculum II

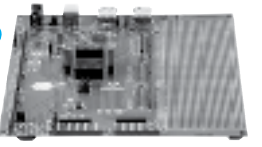
For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	FTDI Chip Part No.	Description	Price Each 1	25	100	500
895-VNC2-32L1A-REEL	VNC2-32L1A-REEL	32 Pin LQFN				
895-VNC2-32Q1A-REEL	VNC2-32Q1A-REEL	32 Pin QFN				
895-VNC2-48L1A-REEL	VNC2-48L1A-REEL	48 Pin LQFP				
895-VNC2-48Q1A-REEL	VNC2-48Q1A-REEL	48 Pin QFN				
895-VNC2-64L1A-REEL	VNC2-64L1A-REEL	64 Pin LQFP				
895-VNC2-64Q1A-REEL	VNC2-64Q1A-REEL	64 Pin QFN				

FTDI V2-EVAL Evaluation and Development Kit for VNC2

The V2-EVAL is a hardware platform designed to support easy evaluation of FTDI's Vinculum-II (VNC2) series of embedded USB host controller devices. The VNC2 is accessed via an onboard daughterboard module enabling support for 32, 48 and 64-pin QFN package types. Daughterboard modules are sold separately.

PRODUCT NEW



RoHS Compliant

Vinculum

For quantities greater than listed, call for quote.

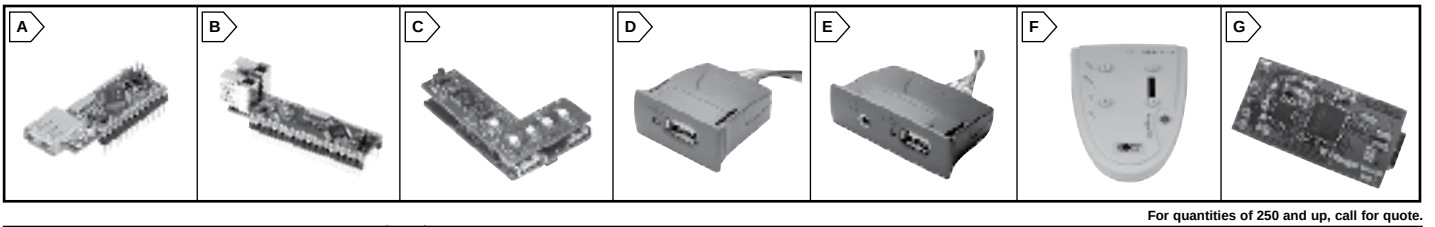
MOUSER STOCK NO.	FTDI Chip Part No.	Description	Price Each 1	10	50	100
Development Board						
895-V-EVAL-1	V-EVAL-1	Dev. Board		--	--	--

Vinculum II

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	FTDI Chip Part No.	Description	Price Each 1	10	50	100
VNC2 Evaluation Kit						
895-V2-EVAL-US	V2-EVAL-US	US Power Supply			--	--
895-V2-EVAL-EU	V2-EVAL-EU	EU Power Supply			--	--
895-V2-EVAL-UK	V2-EVAL-UK	UK Power Supply			--	--
895-V2-EVAL-JP	V2-EVAL-JP	JP Power Supply			--	--
Daughterboard Module						
895-V2-EVAL-EXT32	V2-EVAL-EXT32	32-pin				
895-V2-EVAL-EXT48	V2-EVAL-EXT48	48-pin				
895-V2-EVAL-EXT64	V2-EVAL-EXT64	64-pin				

FTDI VINCULUM AND VINCULUM II MODULES



For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	FTDI Chip Part No.	Fig.	Description	Price Each 1	10	50	100
Vinculum Modules and Accessories							
895-VDIP1	VDIP1	A	Vinculum MCU to USB Host Controller Module				
895-VDIP2	VDIP2	B	Vinculum MCU to 2 USB Host Controller Module				
895-VF2F2	VF2F2	C	Vinculum Digital Media Backup to USB Flash Drive				
895-VDRIVE2	VDRIVE2	D	Vinculum Flash Drive Interface Module				
895-VMUSIC2	VMUSIC2	E	Vinculum Flash Drive Interface w/MP3 Module				
895-VPROG-1	VPROG-1	F	Vinculum Host Controller Programmer		--	--	--
895-VPROG-1-S-LQFP48	VPROG-1-S-LQFP48	--	LQFP48 Socket for programming VNC1L-1A ICs		--	--	--
895-VPROG-1-S-ZIF40	VPROG-1-S-ZIF40	--	ZIF40 Socket for programming VDIP1 & VDIP2 modules		--	--	--
Vinculum II Modules							
895-V2DIP1-32	V2DIP1-32	A	VNC2-32Q Dev Module, 1 USB Port				
895-V2DIP1-48	V2DIP1-48	A	VNC2-48Q Dev Module, 1 USB Port				
895-V2DIP1-64	V2DIP1-64	A	VNC2-64Q Dev Module, 1 USB Port				
895-V2DIP2-32	V2DIP2-32	B	PRODUCT NEW VNC2-32Q Dev Module, 2 USB Ports				
895-V2DIP2-48	V2DIP2-48	B	VNC2-48Q Dev Module, 2 USB Ports				
895-V2DIP2-64	V2DIP2-64	B	VNC2-64Q Dev Module, 2 USB Ports				
895-VNC2DEBUGMODULE	VNC2 DEBUG MODULE	G	VNC2 Debug Module				

FTDI USB-UART AND USB INTERFACE IC'S

FTDI USB To Serial UART IC Devices:

The FT232BL includes a 3.3V regulator, USB Tranceiver that provides USB 1.1 / USB 2.0 full speed physical interface and a 6MHz Oscillator. The FT232RL/RQ has all the features of the BL but includes onboard EEPROM, as well as a 12MHz Oscillator and the FTDIChip-ID™ security dongle feature. The FT232R features a wide range of royaltyfree FTDI developed drivers for 32 and 64 bit operating systems including Windows, CE, XP, Vista, Linux and Mac OS.

FTDI FT245R USB To Parallel FIFO IC Devices:

The FT245R is a USB to parallel FIFO interface, with the new FTDIChip-ID™ security dongle feature. In addition, asynchronous and synchronous bit bang interface modes are available. USB to parallel designs using the FT245R have been further simplified by fully integrating the external EEPROM, clock circuit and USB resistors onto the device. The FT245R adds a new function compared with its predecessors, effectively making it a "2-in-1" chip for some application areas.

FTDI FT2232 Dual UART/FIFO IC Devices:

The FT2232 device features two multi-purpose UART/FIFO controllers which can be configured individually in several different modes. As well as a UART interface, a FIFO interface and the Bit-Bang IO mode of the FT232B and FT245B devices, the FT2232 offers a variety of additional new modes of operation including a Multi-Protocol Synchronous Serial Engine (MPSSE) interface which is designed specifically for synchronous serial protocols such as I2C, JTAG and SPI bus. The FT2232D has an extended temperature range (-40ºC to +85ºC) and adds CPU FIFO mode.

FTDI Hi-Speed Dual/Quad USB IC Devices:

FTDI's new FT2232H and FT4232H are USB 2.0 Hi-Speed devices operating at 480Mbps. In addition to the standard UART and FIFO modes, each of these devices supports FTDI's bit-bang modes and contains two multi-protocol synchronous serial engines (MPSSEs) to allow communication using JTAG, I2C and SPI protocols.

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Hi-Speed USB ICs

RoHS Compliant

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	FTDI Chip Part No.	Description	Price Each 1	10	50	100
895-FT232RL	FT232RL	USB to Serial UART IC, 28 Pin SSOP				
895-FT232RQ	FT232RQ	USB to Serial UART IC, 32 Pin QFN				
895-FT232BL	FT232BL	USB to Serial UART IC, 32 Pin LQFP				
895-FT232BQ	FT232BQ	USB to Serial UART IC, 32 Pin QFN				
895-FT245RL	FT245RL	USB to Parallel FIFO IC, 28 Pin SSOP				
895-FT245RQ	FT245RQ	USB to Parallel FIFO IC, 32 Pin QFN				
895-FT245BL	FT245BL	USB to Parallel FIFO IC, 32 Pin LQFP				
895-FT2232D	FT2232D	Dual USB UART/FIFO I.C, 48 Pin LQFP				
895-FT2232HL	FT2232HL	Hi-Speed Dual USB UART/FIFO IC, 64 Pin LQFP				
895-FT2232HQ	FT2232HQ	Hi-Speed Dual USB UART/FIFO IC, 64 Pin QFN				
895-FT4232HL	FT4232HL	Hi-Speed Quad USB UART IC, 64 Pin LQFP				
895-FT4232HQ	FT4232HQ	Hi-Speed Quad USB UART IC, 64 Pin QFN				

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FTDI USB Interface Products

RoHS Compliant **This product is RoHS compliant.**

FTDI MINI MODULES - USB HI-SPEED EVALUATION MODULES

FTDI's USB 2.0 Hi-Speed Mini Modules are two evaluation modules that support FTDI's FT2232H and FT4232H USB 2.0 Hi-Speed devices. The FT2232HQ-MINI-MODULE is a USB-to-serial/FIFO development module which utilizes the FT2232H USB Hi-Speed two-port bridge chip which handles all the USB signaling and protocols. The FT4232HQ-MINI-MODULE is a USB-serial/MPSSE development module which utilizes the FT4232H USB Hi-Speed four-port bridge chip which handles all the USB signaling and protocols. These Mini Modules allow customers to quickly evaluate the FT2232H and FT4232H device and drivers prior to commencing their own design.

MOUSER STOCK NO.	FTDI Part No.	Fig.	Description	Price Each
895-FT2232HQ-MINIMOD	FT2232HQ-MINI-MODULE	A	Utilizes the FT2232H USB Hi-Speed two-port bridge chip	
895-FT4232HQ-MINIMOD	FT4232HQ-MINI-MODULE	A	Utilizes the FT4232H USB Hi-Speed four-port bridge chip	

FTDI FT232R BASED MODULES

FTDI offers a range of modules based on the FT232R IC. These modules include USB - RS232 converters, DIP modules and a mini-module only slightly larger than a USB connector. These products allow customers to quickly evaluate the FT232R device and drivers prior to commencing their own design.

MOUSER STOCK NO.	FTDI Part No.	Fig.	Description	Price Each
895-EVAL232R	EVAL232R	B	USB to RS232 Evaluation Module for FT232RL	
895-UM232R	UM232R	C	USB-Serial UART Module	
895-MM232R	MM232R	D	Mini USB-Serial UART Module	
895-UB232R	UB232R	E	Mini USB-Serial UART Module w/USB Mini Connector	

FTDI USB-COM-PLUS MODULES

The USB-COM-PLUS modules provide a simple method of adapting legacy serial devices with RS232, RS422 or RS485 interfaces to modern USB ports. The USB-COM232 modules provide either single, dual or quad port options. The USB-COM422 and USB-COM485 modules provide single or dual port options. Single port modules feature a USB 2.0 Full Speed (12Mb/s) interface while all multi-port modules feature a USB 2.0 Hi-Speed (480Mb/s) interface. All modules are powered from the USB port, saving the need for an additional external power adapter and associated costs, feature operating temperature range of -40oC to +85oC and are CE/FCC approved.

MOUSER STOCK NO.	FTDI Part No.	Fig.	Description	Price Each
895-USB-COM232-PLUS1	USB-COM232-PLUS1	F	Full-Speed USB to 1-Port RS232 Module, utilizes FT232R IC	
895-USB-COM232-PLUS2	USB-COM232-Plus2	G	Hi-Speed USB to 2-Port RS232 Module, utilizes FT2232H IC	
895-USB-COM232-PLUS4	USB-COM232-Plus4	H	Hi-Speed USB to 4-Port RS232 Module, utilizes FT4232H IC	
895-USB-COM422-PLUS1	USB-COM422-Plus1	F	Full-Speed USB to 1-Port RS422 Module, utilizes FT232R IC	
895-USB-COM422-PLUS2	USB-COM422-Plus2	G	Hi-Speed USB to 2-Port RS422 Module, utilizes FT2232H IC	
895-USB-COM422-PLUS4	USB-COM422-Plus4	H	Hi-Speed USB to 4-Port RS422 Module, utilizes FT4232H IC	
895-USB-COM485-PLUS1	USB-COM485-Plus1	F	Full-Speed USB to 1-Port RS485 Module, utilizes FT232R IC	
895-USB-COM485-PLUS2	USB-COM485-Plus2	G	Hi-Speed USB to dual-Port RS485 Module, utilizes FT2232H IC	
895-USB-COM485-PLUS4	USB-COM485-Plus4	H	Hi-Speed USB to 4-Port RS485 Module, utilizes FT4232H IC	

FTDI UM245R USB SERIAL MODULE

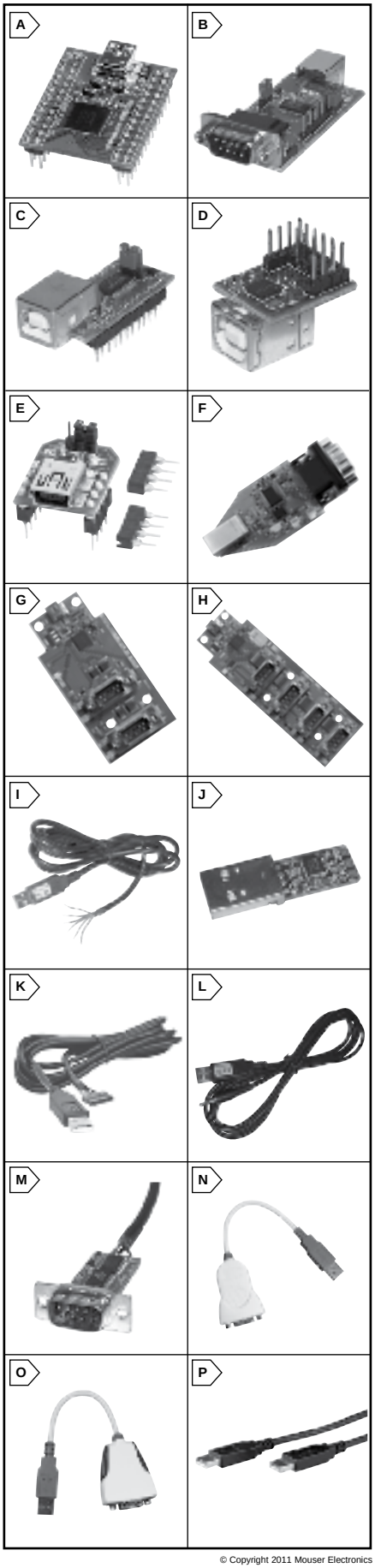
The UM245R module is a USB - Parallel FIFO interface (TTL) development module for the FT245R IC device. The UM245R is supplied on a PCB designed to fit a 24 pin DIP socket, and provides access to all FIFO interface and control pins (TXE#, RXF#, RD#, WR) of the FT245R device. This module can be configured as either USB bus-powered or self-powered and also supports 5V or 3V level interface IOs via two sets of jumper setting pins and can transfer data at up to 1 MegaByte per second.

MOUSER STOCK NO.	FTDI Part No.	Fig.	Description	Price Each
895-UM245R	UM245R	C	USB to Parallel FIFO Module	

FTDI CABLES

FTDI offers a variety of converter cables which allow customers to quickly evaluate other FTDI devices and drivers prior to commencing their own design.

MOUSER STOCK NO.	FTDI Part No.	Fig.	Description	Price Each
895-TTL-232R-3V3-WE	TTL-232R-3V3-WE	I	USB to TTL Serial Converter Cable - Wire Ended, 3.3V IOs	
895-TTL-232R-5V-WE	TTL-232R-5V-WE	I	USB to TTL Serial Converter Cable - Wire Ended, 5V IOs	
895-USBRS232WE1800BT	USB-RS232-WE-1800-BT	I	USB to RS232 Levels Serial UART Converter Cable - Wire Ended	
895-USBRS422WE1800BT	USB-RS422-WE-1800-BT	I	USB to RS422 Levels Serial UART Converter Cable - Wire Ended	
895-USBRS485WE1800BT	USB-RS485-WE-1800-BT	I	USB to RS485 Levels Serial UART Converter Cable - Wire Ended	
895-TTL-232R-3V3-PCB	TTL-232R-3V3-PCB	J	USB to TTL Serial UART Converter - PCB Only, 3.3V IOs	
895-TTL-232R-5V-PCB	TTL-232R-5V-PCB	J	USB to TTL Serial UART Converter - PCB Only, 5V IOs	
895-USB-RS232-PCBA	USB-RS232-PCBA	J	USB to RS232 Level Serial UART Converter - PCB Only	
895-USB-RS422-PCBA	USB-RS422-PCBA	J	USB to RS422 Level Serial UART Converter - PCB Only	
895-USB-RS485-PCBA	USB-RS485-PCBA	J	USB to RS485 Level Serial UART Converter - PCB Only	
895-TTL-232R-3V3	TTL-232R-3V3	K	USB to TTL Serial Converter Cable - 3.3V IOs	
895-TTL-232R-5V	TTL-232R-5V	K	USB to TTL Serial Converter Cable - 5V IOs	
895-TTL-232R-3V3-2MM	TTL-232R-3V3-2MM	K	USB to TTL Serial Converter Cable - 8 Pin Header 2mm Pitch, 3.3V IOs	
895-TTL-232R-5V-AJ	TTL-232R-5V-AJ	L	USB to TTL Serial Converter Cable - Audio Jack Connector, 5V IOs	
895-UC232R-NE	UC232R-NE ChiPi	M	USB to RS232 (DB9) Converter - No Enclosure	
895-UC232R-10	UC232R-10 ChiPi	N	Economy Version USB to RS232 (DB9) Converter	
895-US232R-10-BLK	US232R-10-BLK	O	Premium USB to RS232 Converter - 10cm Cable, Bulk Pack (Cable Only)	
895-US232R-100-BLK	US232R-100-BLK	O	Premium USB to RS232 Converter - 1m Cable, Bulk Pack (Cable Only)	
895-USB-NMC-2.5M	USB NMC-2.5m	P	USB to USB Null Modem Cable 2.5m	



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MULTI-TECH Universal Sockets and Embedded Modems

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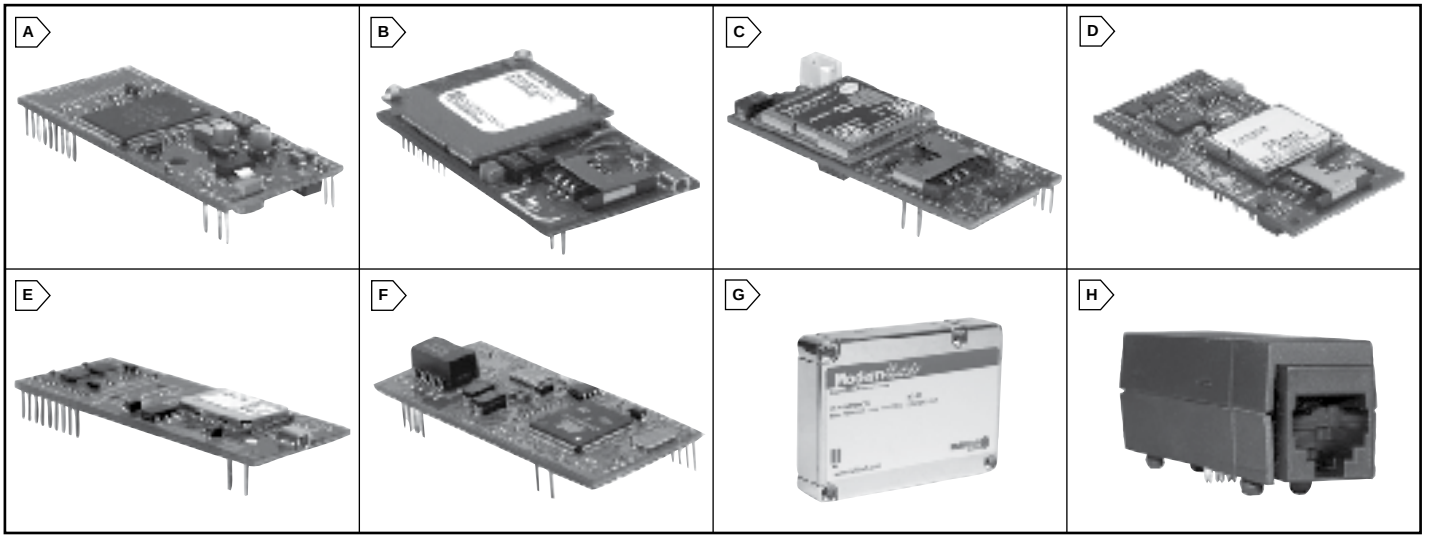

UNIVERSAL SOCKET MODULES

Multi-Tech's Universal Socket is a flexible, comm-port architecture that provides cellular, Ethernet, PSTN or Wi-Fi® network access with interchangeable modules.

NEW! TECHNOLOGY

• Interchangeable socket module • Quick-to-market • Global approvals • 2 Year Warranty • Easy migration to future networks • Universal Socket

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Multi-Tech Part No.	Fig.	Description	Voltage (V)	Price Each 1	10	25	50
SocketModem® - Analog - Dial-Up								
899-MT2492SMI-22	MT2492SMI-22	A	V.22 Serial/Data Only - Embedded Modem	5				
899-MT5692SMI-34	MT5692SMI-34	A	V.34 Serial/Data, V.17 Fax - Embedded Modem	5				
899-MT2492SMI-L-92	MT2492SMI-L-92	A	V.92 Serial/Data Only - Embedded Modem	3.3				
899-MT5692SMI-92	MT5692SMI-92	A	V.92 Serial Data, V.17 Fax - Embedded Modem	5				
899-MT5692SMI-L-92	MT5692SMI-L-92	A	V.92 Serial Data, V.17 Fax - Embedded Modem	3.3				
899-MT5692SMI-V-92	MT5692SMI-V-92	A	V.92 Serial Data, V.17 Fax/Voice - Embedded Modem	5				
899-MT5692SMI-IP-92	MT5692SMI-IP-92	A	V.92 Serial Data Only + IP - Embedded Modem	5				
899-MT9234SMI-92.R1	MT9234SMI-92.R1	A	V.92 Serial Data, V.34 Fax - Embedded Modem	5				
899-MT9234SMI-L-92R1	MT9234SMI-L-92.R1	A	V.92 Serial Data, V.34 Fax - Embedded Modem	3.3				
SocketModem® GPRS/EDGE/CDMA/HSDPA/iCell/Cell - Cellular								
899-MTSMC-E1	MTSMC-E1	B	Embedded Quad Band EDGE Modem Class 12	5				
899-MTSMC-G-F4.R1	MTSMC-G-F4.R1	C	Quad-Band GPRS Class 10 - Embedded Modem	5				
899-MTSMC-G-F4-IP.R1	MTSMC-G-F4-IP.R1	C	Quad-Band GPRS Class 10 w/Univ IP - Embedded Modem	5				
899-MTSMC-G2	MTSMC-G2	D	Cell - Quad-Band GPRS Class 10, 850/1900 MHz	5				
899-MTSMC-G2-IP	MTSMC-G2-IP	D	iCell - Quad-Band GPRS Class 10 with Univ IP	5				
899-MTSMC-G2-ED	MTSMC-G2-ED	D	Cell - Quad-Band GPRS Class 10, 900/1800 MHz	5				
SocketWireless® Device Server								
899-MTS2BTSMI-L.R3	MTS2BTSMI-L.R3	E	Embedded Serial-to-Bluetooth Device Server	3.3				
899-MTS2BTSMI.R3	MTS2BTSMI.R3	E	Embedded Serial-to-Bluetooth Device Server	5				
SocketEthernet IP® Device Server								
899-MT100SEM-IP	MT100SEM-IP	F	Serial-to-Ethernet + with Univ IP Device Server	5				
899-MT100SEM-L-IP	MT100SEM-L-IP	F	Serial-to-Ethernet + with Univ IP Device Server	3.3				

Universal Socket Development Kit (Module Not Included)

For quantities of 5 and up, call for quote.

MOUSER STOCK NO.	Multi-Tech Part No.	Includes	Price Each
899-MTSMI-UDK	MTSMI-UDK	Development Board with RS-232 DB-25 Connector, Universal Power Supply, RJ-11 Jack, RS-232 Cable and Developer Guide CD	

MMCMODEM™

The MMCModem™ GPRS and MMCModem™ CDMA wireless modems include the controller, RF transceiver, SIM socket (GSM), and antenna connector packaged in a compact industrial metal chassis. Built on industry-standard open interfaces, they are ideal for applications that periodically need to send and receive data over a wireless network.

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Multi-Tech Part No.	Fig.	Description	Voltage (V)	Price Each 1	10	25	50
899-MTMMC-G-F4.R1	MTMMC-G-F4.R1	G	MMCModem™ Quad Band GPRS	5				

RJMODEM™

The Multi-Tech Serial Data RJModem creates communication-ready devices by integrating modem functionality into the most compact, integrated device. The first-of-its kind RJ11 form factor includes the controller, data pump, DAA and RJ-11 connector providing device manufacturers with the ability to integrate dial-up connectivity into any product design.

• RJ-11 Form Factor • Global approvals • Easy migration to future networks

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Multi-Tech Part No.	Fig.	Description	Voltage (V)	Price Each 1	10	25	50
Modems								
899-MT5656RJ-L-92.R3	MT5656RJ-L-92.R3	H	Embedded V.92 Data Modem, 56K, Serial Data Only	3.3				
899-MT5656RJ-92.R3	MT5656RJ-92.R3	H	Embedded V.92 Data Modem, 56K, Serial Data Only	5				
899-MT5656RJ-L-34.R3	MT5656RJ-L-34.R3	H	Embedded V.34 Data Modem, 33.6K, serial Data Only	3.3				
RJModem™ Development Kit (RJModem Not Included)								
899-MTRJ-DK	MTRJ-DK	-	RJModem Developer Kit 100-240V	-		-	-	-

ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Multi-Tech Part No.	Description	Price Each 1	25	50	100
899-ANBT-1HRA	ANBT-1HRA	Bluetooth/Wi-Fi Hinged Antenna, Reverse Polarity, 4"				
899-ANCF2-10HRA	ANCF2-10HRA	850/1900 MHz Hinged Antenna 4"				
899-ANF1-1HRA	ANF1-1HRA	900/1800 MHz Hinged Antenna 4"				
899-ANQB-10HRA	ANQB-10HRA	850/900/1800/1900 MHz Hinged Antenna, 7"				
899-CARSMA-MMCX-10	CARSMA-MMCX-10	Reverse SMA-to-MMCX Coax RF Cable 6"				
899-CASMA-MMCX-1	CASMA-MMCX-1	SMA-to-MMCS Coax RF Cable 6"				

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NETBURNER Embedded Modules

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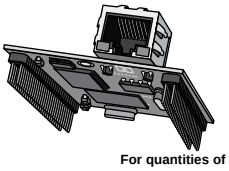
32-BIT 10/100 ETHERNET CORE PROCESSOR MODULES

NetBurner core modules allow you to quickly and easily create an embedded product, create a network-enabled product, or add network connectivity to an existing product. These modules can be used as the main processor or as a secondary network co-processor. Features include: 10/100 Ethernet, digital, analog and serial control.



Core Modules

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Netburner Part No.	Clock	Flash	RAM	UARTs	GPIO	Timers	Operating Temperature	Price Each 1	10	25	50
820-MOD5234-100IR	MOD5234-100IR	147MHz	2MB	8MB	3	47	8	-40°C to +85°C				
820-MOD5270-100IR	MOD5270-100IR	147MHz	512KB	2MB SD	3	47	8	-40°C to +85°C				
820-MOD5272-100IR	MOD5272-100IR	62MHz	2MB	8MB SD	2	22	4	-40°C to +85°C				
820-MOD5282-100IR	MOD5282-100IR	66MHz	512KB	8MB SD	3	50	16	-40°C to +85°C				

Development Kit
Quickly and easily customize your specific application requirements using the NetBurner Network Development Kits.

Development Kit Contents:
- 32-bit Core Processor Module
- Development Board
- CD-ROM
- Network Cables
- Serial Cable
- 12 Volt Power Supply for US/Canada

RoHS Compliant

MOD5270 Development Kit

MOUSER STOCK NO.	Netburner Part No.	Description	Price Each
820-NNDK-MOD5234-KIT	NNDK-MOD5234-KIT	MOD5234 Development Kit	
820-NNDK-MOD5270-KIT	NNDK-MOD5270-KIT	MOD5270 Development Kit	
820-NNDK-MOD5272-KIT	NNDK-MOD5272-KIT	MOD5272 Development Kit	
820-NNDK-MOD5282-KIT	NNDK-MOD5282-KIT	MOD5282 Development Kit	

32 BIT MOD5213 HIGH PERFORMANCE EMBEDDED PROCESSOR MODULE

The Mod5213 has a rich set of peripherals making it ideal for both communications and control applications. This small form factor module is targeted at the high performance extended temperature low power market. Available in a 40 pin DIP, the Mod5213 boasts 66MHz of performance on a 32 bit ColdFire platform. The Mod5213 development kit also includes all the tools necessary to complete your embedded design, including a world class IDE, Graphical Debugger, and Real Time Operating System.

Process Specifications:
- 32-bit Freescale ColdFire 5213 running at 66MHz

Hardware Specification:
- 32 KB SRAM
- 256 KB Flash
- MAC Module and HW Divide
- Low-power optimization
- Four 32-bit timer channels with DMA capability
- Four 16-bit timer channels with capture/compare/PWM
- 4-channel 16-bit/8-channel 8-bit PWM generator
- Two periodic interrupt timers (PITs)
- 4-channel DMA controller
- 8-channel 12-bit ADC
- Up to 33 general-purpose I/O
- System integration (PLL, SW watchdog)
- CAN 2.0B controller with 16 message buffers
- Three UARTs with DMA capability

Software Development:
- NetBurner Development Kit includes: Mod5213 Development Board, Real-Time OS, C/C++ Compiler, Integrated Development Environment (IDE), Graphical Debugger, configuration and deployment tools.

Connectors:
- Two standard single row 20-pin 0.1" headers
- PIN Dimensions: 1.9" x 0.6"

Physical Characteristics:
- Industry Standard 40-pin DIP
- Dimensions: 2.0" x 2.6"

Power Requirements:
- DC Input Voltage: 4V - 7V, or 3.3V Regulated
- Operating current: 120mA Environmental
- Operating Temperature: -40 - +85°C

MOD5213 Development Kit
This Development kit contains all the hardware, software, and tools you need to start writing application code for your product or idea immediately. All components are integrated and ready to run so you don't waste any time configuring individual components.

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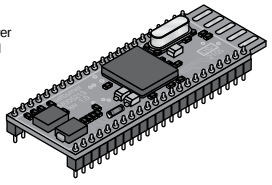

MOD5213 Module

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Netburner Part No.	Price Each 1	10	25	50
820-MOD5213-100IR	MOD5213-100IR				

MOD5213 Development Kit

MOUSER STOCK NO.	Netburner Part No.	Price Each
820-NNDK-MOD5213-KIT	NNDK-MOD5213-KIT	

32-BIT SERIAL-TO-ETHERNET PROCESSOR BOARDS

If your application requires TTL level serial ports, just plug in the SB70 and go! If you require RS-232, RS-422 or RS-485, please see the SB72 Ethernet to Serial Processor Board.

SB70 Processor Board
The NetBurner SB70 is designed for applications that require a high performance/low cost 10/100 Ethernet interface to serial devices. The SB70 come preloaded with software to translate serial and Ethernet data, and is configurable through any web browser. The SB70 application code can be customized to any specific application requirements with the NetBurner Network Development Kit.

SB70 Processor Board Features:
- Processor: 32-bit Freescale ColdFire 5270 with integrated 10/100 Ethernet MAC
- Speed: 145MPS @ 150MHz
- Network Interface: 10/100BaseT with RJ-45 Jack
- Flash Memory: 512KB
- SDRAM: 2MB
- Power Requirements: 480mA @ 5V
- LEDs: Link, Speed/Data, Power
- Network Protocols: ARP, DHCP, BOOTP, TCP, UDP, ICMP, Telnet, HTTP, SNMP
- Dimensions: 3.25" X 2"

SB72 Processor Board
The NetBurner SB72 is designed for applications that require a high performance/low cost 10/100 Ethernet interface to serial devices. The SB72 come preloaded with software to translate serial and Ethernet data, and is configurable through any web browser. The SB72 application code can be customized to any specific application requirements with the NetBurner Network Development Kit. The SB72 is similar to the SB70, with the addition of RS-232 and RS-485 level shifters.

SB72 Processor Board Features:
- Speed: 63MPS @ 66MHz
- Network Interface: 10/100BaseT with RJ-45 Jack
- Serial Ports Supported: RS-232, RS-422, RS-485, TTL
- Flash Memory: 512KB
- SDRAM: 8MB
- Power Requirements: 480mA @ 5V
- LEDs: Link, Speed/Data, Power
- Network Protocols: ARP, DHCP, BOOTP, TCP, UDP, ICMP, Telnet, HTTP, SNMP
- Dimensions: 3.25" X 2"

Development Kit Contents:
- SBXX Processor Board
- Adapter board to assist in development. It is not required to operate. The adapter board includes a switching power supply, RS-232 level shifters and two DB-9 connectors.
- CD-ROM containing source code, development tools, manuals and documentation.
- Cross-wired and straight-through twisted pair network cables
- Serial cable
- 12 VDC power supply (US and Canada only)

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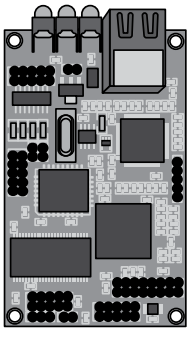

SB70 Processor Board

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Netburner Part No.	Price Each 1	10	25	50
820-SB70-100CR	SB70-100CR				

SB72 Processor Board

820-SB72-300CR	SB72-300CR				

SB70 Development Kit

MOUSER STOCK NO.	Netburner Part No.	Price Each
820-NNDK-SB70-KIT	NNDK-SB70-KIT	

MOD72 Development Kit

820-NNDK-SB72-KIT	NNDK-SB72-KIT	

SB72-EX DUAL PORT SERIAL-TO-ETHERNET EXTERNAL DEVICE

SB72-EX to Network-Enable Existing Applications:
The SB72-EX network-enables serial devices right out of the box. No programming or development is required; the SB72-EX is pre-programmed to convert RS-232, RS-422, RS-485, and TTL data to Ethernet, enabling communication with the serial device over a network or the Internet. The onboard web server provides easy device configuration using a standard web server.

Hardware Specifications:
- 10/100BaseT with RJ-45 connector
- 32-bit Motorola ColdFire 5272 with integrated 10/100 Ethernet
- 2MBytes flash, 8MBytes of SDRAM
- Power: 12V, 500mA
- Operating Temperature: 0° to 70°C
- Dimensions: 4.2" x 3.0"
- Weight 5 oz
- UL and CUL approvals
- LEDs: Link, Speed/Data, Power
- The 2 UARTS can be configured:
  Two RS-232 ports
  One RS-232 port, one RS-485/422 port (full or half duplex)

Software Specifications:
- Configuration through web browser, telnet, SNMP, or NetBurner IP Setup utility
- Password protection
- Firmware updates through network or serial connections

Network Protocols Supported:
- ARP, DHCP, BOOTP, TCP, UDP, ICMP, Telnet, HTTP, SNMP

Note: additional protocols supported with development kit.

Development Kit
The SB72-EX Network Development kit contains everything you need to create custom applications on your SB72-EX device: Real-time operating system, TCP/IP Stack, Web Server, C/C++ compiler and linker, Integrated Development Environment (IDE), Debugger, and product deployment tools.

Development Kit Contents:
- SB72-EX Device Box
- CD-ROM containing source code, development tools, manuals, and documentation
- Cross-wired and straight-through twisted pair network cables
- Serial cable
- 12 VDC power supply (US and Canada only)

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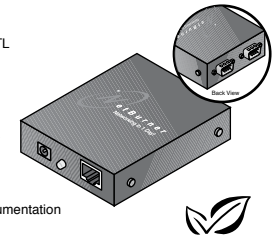

SB-72-EX Device

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Netburner Part No.	Price Each 1	10	25	50
820-SB72-EX-100CR	SB72-EX-100CR				

SB-72-EX Device Development Kit

MOUSER STOCK NO.	Netburner Part No.	Price Each
820-NNDK-SB72EX-KIT	NNDK-SB72EX-KIT	

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PARALLAX BASIC Stamp Modules and Accessories

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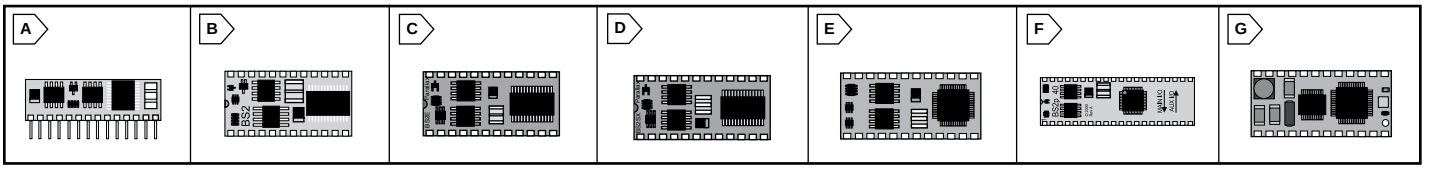
BASIC STAMP MODULES

BASIC Stamps are small computers with 8 or 16 I/O lines that can be connected to TTL level devices and also, with a few extra components, solenoids, relays, and RS232 networks. Their simple language and easy interfacing make BASIC Stamps ideal for many applications for industrial, educational, and hobbyist customers. BASIC Stamps require only editor software, a prototype area, and cable to get started. Each BASIC Stamp has on board it's own non-volatile EEPROM, voltage regulator, resonator, and microcontroller.



• Operating Temperature at 70% Non-Condensing Humidity: 0°C to +70°C

† Plus 2 Dedicated Serial I/O Pins

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Fig.	Package	Microcontroller	EEPROM Size (Bytes)	Speed	I/O Pins	PBASIC Commands	Interface (Port)	Operating Voltage	Price Each 1	Price Each 10	Price Each 25
619-BS1-IC	BS1-IC	A	SIP-14	Microchip PIC16C56c	256	4MHz	8	32	Parallel	5 - 15VDC			
619-BS2-IC	BS2-IC	B	DIP-24	Microchip PIC16C57c	2K	20MHz	16 †	36	Serial	5 - 15VDC			
619-BS2E-IC	BS2E-IC	C	DIP-24	Ubicom SX28AC	8 X 2K	20MHz	16 †	39	Serial	5 - 12VDC			
619-BS2SX-IC	BS2SX-IC	D	DIP-24	Ubicom SX28AC	8 X 2K	50MHz	16 †	39	Serial	5 - 12VDC			
619-BS2P24-IC	BS2P24-IC	E	DIP-24	Ubicom SX48AC	8 X 2K	20MHz Turbo	16 †	55	Serial	5 - 12VDC			
619-BS2PX-IC	BS2PX-IC	E	DIP-24	Ubicom SX48AC	8 x 2K	32MHz Turbo	16 †	63	Serial	5 - 12VDC			
619-BS2P40-IC	BS2P40-IC	F	DIP-40	Ubicom SX48AC	8 X 2K	20MHz Turbo	32 †	55	Serial	5 - 12VDC			
619-JS1-IC	JS1-IC	G	DIP-24	Ubicom SX48BD	32768	25MHz Turbo	16	0 (Java)	Serial	6 - 24VDC (unreg)			

BASIC STAMP DISCOVERY KIT - SERIAL (WITH USB ADAPTER AND CABLE)

Our most popular BASIC Stamp microcontroller is the BS2-IC module. Widely used in education, hobby, and industry, this module has enough program space, execution speed, and I/O pins for many applications. Now featured with the What's a Microcontroller curriculum and parts kit, this Starter Kit has our highest recommendation. The Discovery Kit is an incredible value!

Build over 40 Hands On Projects

With the latest edition of this kit, you will receive the What's a Microcontroller? (WAM) parts and text making the Discovery Kit a bona fide "Getting Started" kit. With the WAM kit you'll get your feet wet through a series of over 40 activities designed to provide you with the best possible introduction to the world of BASIC Stamp modules. The text contains clear explanations, defines electronics terms in a friendly manner, and most importantly builds your confidence so you can start building your own electronics inventions.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-EDSTR-KIT	27207	Basic Stamp Discovery Kit Serial with USB Adapter	
619-27807	27807	Basic Stamp Discovery Kit USB	

STAMPWORKS EXPERIMENT KIT

It's easy to get started micro-controlling your world with StampWorks. The StampWorks manual includes 35 experiments based on the BASIC Stamp® 2 microcontroller and the Professional Development Board (included). StampWorks gives you the hardware, the electrical components and, most importantly, the know-how to become a confident embedded programmer. Working your way through StampWorks you will learn about efficient embedded design, connecting circuits and "smart" sensors to the BASIC Stamp, adding computer control to your projects, and "Power PBASIC" programming techniques.

After you've worked your way through StampWorks you'll be able to: flash LEDs, use 7-segment and LCD displays, monitor one or several push-buttons or switches, add sounds and sound effects to your projects, build a simple light-controlled Theremin, control servos and stepper motors, measure temperature, voltage, and so much more! When you are finished, you will be able to write your own BASIC Stamp programs to control your hobby, engineering, and student projects using a variety of electronic circuits - and you'll be able to do it with the confidence.

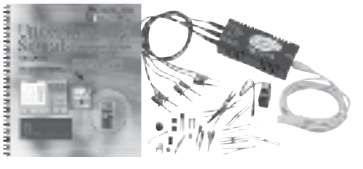
For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-27297	27297	StampWorks Experiment Kit	
619-28138	28138	Professional Development Board Serial	

UNDERSTANDING SIGNALS PARTS AND TEXT/PARALLAX OSCILLOSCOPE

The Understanding Signals Parts and Text Kit adds a 144-page student guide and many electronic components to the Parallax USB Oscilloscope. Learn how to generate, view, and measure a variety of wave forms. Each activity includes a BASIC Stamp®-controlled example circuit and code, directions for configuring the oscilloscope and placing the probes, and screen-captures of the Parallax USB Software interface displaying the signal.

A Board of Education with a BASIC Stamp 2 or a HomeWork Board is needed to run the experiments in this kit.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-28119	28119	Understanding Signals Parts and Text	
619-28014	28014	Parallax Oscilloscope	

SX TECH TOOL KIT/ SX CHIPS/ PROGRAMMERS AND PROTO BOARDS

The popular SX Tech Tool Kit is an excellent starting point to get you developing SX projects with Parallax's SX-Key programming tool. Upon receiving the kit, you will be able to program SX chips within the hour. A power supply is not included.

The SX-Key is Parallax's primary development tool for the SX line of microcontrollers, supporting every chip that is commercially available. Using the free SX-Key software, the SX-Key programming tool can program SX chips in-system and perform in-circuit source-level debugging. Also at the user's fingertips is an on-board programmable clock. The frequency output of this clock is adjusted from the software with a slider bar between 400kHz and 100MHz. The software operates on Win98/NT/2K/XP platforms.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-28015	28015	PING))) Ultrasonic Sensor	
619-28146	28146	Parallax GPS Receiver Module	
619-900-00008	900-00008	Parallax (Futaba) Continuous Rotation Servo	
619-900-00005	900-00005	Parallax (Futaba) Standard Servo	
619-28028	28028	Sensor Sampler Kit	
619-28017	28017	Memsic 2125 Dual-axis Accelerometer	
619-27977	27977	Parallax 2x16 Serial LCD (Backlit)	
619-29123	29123	Hitachi HM55B Compass Module	
619-28180	28180	433 MHz Transceiver Package	
619-30013	30013	Parallax Internet Netburner Kit	
619-28031	28031	Parallax USB to Serial (RS-232) Adapter with Cable	
619-27979	27979	Parallax 4x20 Serial LCD (Backlit)	
619-28302	28302	TCS230-DB Color Sensor	
619-28026	28026	Hitachi H48C Tri-Axis Accelerometer Module	
619-28018	28018	Sensirion Temperature/Humidity Sensor	
619-32390	32390	RFID Reader Module and Tag Sampler Kit	
619-555-28027	555-28027	PIR Sensor	
619-29144	29144	HB-25 Motor Controller	

BASIC STAMP ACCESSORIES

Launch yourself into the Accessories Portal and select add on products such as sensors, Application Modules, RF devices, lab tools, and other items to round out your project or application. If you already have a BASIC Stamp® microcontroller or Javelin Stamp™ module and development board, you may now take your project to the next level. There is a wide array of accessories for the BASIC Stamp microcontroller.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-SX-SXTECH	45180	SX Tech Tool Kit	
619-SX20AC/SS-G	SX20AC/SS-G	SX Microcontroller SX20AC/SS-G	
619-SX28AC/SS-G	SX28AC/SS-G	SX Microcontroller SX28AC/SS-G	
619-SX48BD-G	SX48BD-G	SX Microcontroller SX48BD-G	
619-SX28AC/DP-G	SX28AC/DP-G	SX Microcontroller SX28AC/DP-G	
619-SX-BLITZ	45170	SX Blitz programmer	
619-45214	45214	SX Key Programmer	
619-45205	45205	SX Tech Board	
619-45302	45302	SX28 Proto Board	
619-45300	45300	SX48 Proto Board	

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PARALLAX Accessories and FPGA Development Tools

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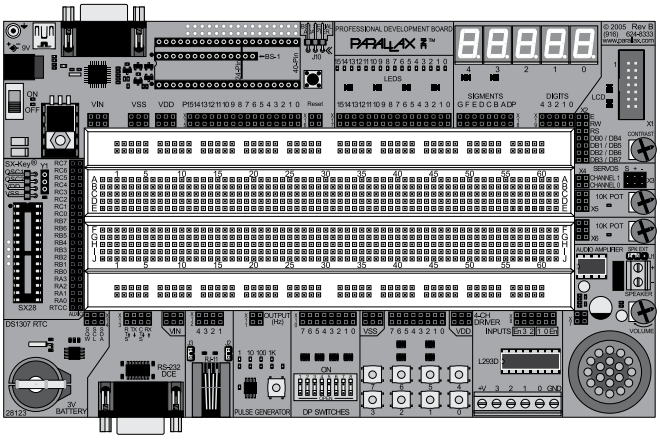
PROFESSIONAL DEVELOPMENT BOARD

The Parallax Professional Development Board (PDB) is high-quality, fully-integrated development platform for BASIC Stamp®, Javelin Stamp, and Ubicom® SX28AC/DP microcontrollers.

Features:

- 40-pin DIP socket (for all BASIC Stamp 24/40-pin and Javelin Stamp modules)
- 14-pin SIP socket (for BS1-IC)
- 28-pin "skinny" DIP socket (for SX28AC/DP)
- USB, DB-9, BS1, and SX-Key programming connectors
- 5 volt, 1.0 amp power-supply with power switch
- Five blue 7-segment (with decimal point), common-cathode LED displays
- Parallel LCD (available separately) may be configured in 4-bit or 8-bit mode
- Two servo-compatible headers
- Two 10k Ohm potentiometers
- L293D high-current driver for motors, solenoids, etc.
- Eight, normally-open pushbuttons (I/O lines protected, and pulled-up to Vdd via 10K)
- Pulse generator with selectable frequency (1Hz, 10Hz, 100Hz, or 1kHz)
- RS-232 DCE port with MAX232E transceiver

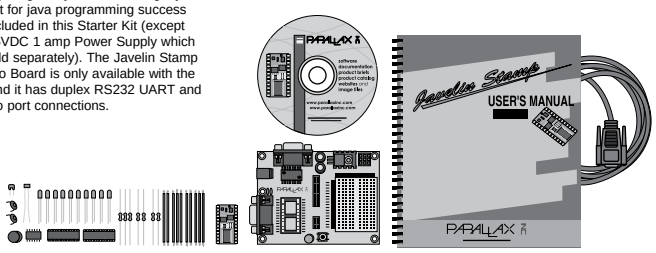


For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-28138	28138	Professional Development Board	

JAVELIN STAMP STARTER KIT

Everything that you need to begin your quest for java programming success is included in this Starter Kit (except a 7.5VDC 1 amp Power Supply which is sold separately). The Javelin Stamp Demo Board is only available with the kit and it has duplex RS232 UART and servo port connections.

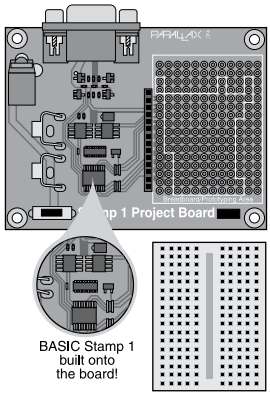


For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-27237	27237	Project Board, parts, manual, Serial Cable	

BASIC STAMP 1 PROJECT BOARD

For students, hobbyists, and professionals who desire the small form and features of the BASIC Stamp 1 microcontroller, but need a development platform in the mold of the Parallax BOE and HomeWork boards, the BASIC Stamp 1 Project Board is low-cost solution that is sure to fit the bill.



For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-27112	27112	Project Board with built in BASIC Stamp	

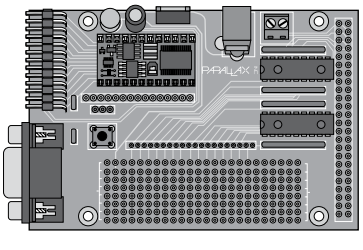
BASIC STAMP ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-BS1USB	BS1USB	BS1 USB Board - USB-A Connection BS1 Module	
619-27924	27924	Taos TSL230 Light to Frequency Converter	
619-28015	28015	Ping))) Ultrasonic Sensor	
619-570-28015	570-28015	Ping))) Mounting Bracket	
619-28017	28017	Memsic Accelerometer (Dual Axis)	
619-28018	28018	Sensirion Temperature/Humidity Sensor	
619-28026	28026	Hitachi H48C 3-Axis Accelerometer	
619-28130	28130	AD592 Temp Probe	
619-29123	29123	Hitachi HM55B Compass Module	
619-30056	30056	FlexiForce Sensor	
619-350-00009	350-00009	Photoresistor	
619-555-28027	555-28027	PIR Motion Sensor	
619-27970	27970	112 x 16 Serial Graphic VFD Display	
619-27976	27976	Serial LCD - Parallax 2 x 16 Non-backlit	
619-27977	27977	Serial LCD - Parallax 2 x 16 Backlit	
619-27979	27979	Serial LCD - Parallax 4 x 20 Backlit	
619-30057	30057	Serial LCD - Matrix Orbital 2x20 Backlit	
619-30058	30058	Serial LCD - Matrix Orbital 4x20 Backlit	

STAMP CONTROLLER INTERFACE BOARD

The Stamp Controller Interface allows the BASIC Stamp® microcontroller to connect directly to industrial type digital I/O control boards produced by Opto22, Grayhill, Allen-Bradley, and others that accept 0-5 VDC voltage control levels. These optically isolated modules are ideal for interfacing microcontrollers to the real world, and are more reliable by providing proper isolation. The Stamp Controller Interface accepts all BASIC Stamp modules. A 9-12 VDC, 2.1 mm jack is included for external power supply (sold separately).



For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Parallax Part No.	Description	Price Each
619-27945	27945	Project Board accepts all BASIC Stamps	

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RABBIT Core Modules and Development Kits

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RCM2XXX RABBITCORE MICROPROCESSOR MODULES

The RabbitCore family of microprocessor core modules is designed to facilitate rapid development and implementation of embedded systems. The RabbitCore mounts on a user-designed motherboard and acts as the controlling microprocessor for the user's system. Small in size but packed with powerful features, these core modules give designers a complete package for control and communication.

RCM20XX RabbitCore

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0404	20-101-0404	A	RCM 2000 RabbitCore Module	25.80	256K	512K	40	2-6		
694-20-101-0405	20-101-0405	A	RCM 2010 RabbitCore Module	18.43	256K	128K	40	2-6		
694-20-101-0383	20-101-0383	A	RCM 2020 RabbitCore Module	18.43	256K	128K	40	2-6		

RCM21XX RabbitCore

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0434	20-101-0434	B	RCM2100 RabbitCore Module	22.1	512K	512K	34	2-6		
694-20-101-0435	20-101-0435	B	RCM2110 RabbitCore Module	22.1	256K	128K	34	2-6		
694-20-101-0436	20-101-0436	B	RCM2120 RabbitCore Module	22.1	512K	512K	40	2-6		
694-20-101-0446	20-101-0446	B	RCM2130 RabbitCore Module	22.1	256k	128K	40	2-6		

RCM2200 RabbitCore US Development Kit

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Description	Price Each
694-101-0475	101-0475	RCM2200 US Development Kit	

RCM22XX RabbitCore

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0454	20-101-0454	C	RCM2200 RabbitCore Module w/ Ethernet	22.1	256K	128K	26	2-6		
694-20-101-0488	20-101-0488	C	RCM2210 RabbitCore Module w/ Ethernet	22.1	256K	128K	26	2-6		
694-20-101-0494	20-101-0494	C	RCM2250 RabbitCore Module w/ Ethernet	22.1	512K	512K	26	2-6		
694-20-101-0955	20-101-0955	C	RCM2250 RabbitCore Module w/ Ethernet	22.1	512K	512K	26	2-6		

RCM23XX RabbitCore

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0453	20-101-0453	D	RCM2300 RabbitCore Module	22.1	256K	128K	29	2-6		

RCM3000 AND RCM3010 RABBITCORE

The RCM3000 RabbitCore is our powerful and feature-packed 10Base-T Ethernet microprocessor core module. Powered by the new Rabbit 3000™ - the "EMI-Free microprocessor"—the RCM3000 is the ideal option for designers who want to rapidly develop and implement embedded systems with fully integrated Ethernet connectivity. Measuring only 2.73" x 1.85" (69 x 47mm), the RCM3000 operates at 3.3V (with 5 V-tolerant I/O) and features 6 serial ports. Built-in low-EMI features, including a clock spectrum spreader, help designers eliminate the kind of emissions-related problems that frequently derail tight development schedules.

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0507	20-101-0507	E	RCM 3000 RabbitCore Module	29.4	512K	512K	52	2-6		
694-20-101-0508	20-101-0508	E	RCM 3010 RabbitCore Module	29.4	256K	128K	52	2-6		

RCM3000 RabbitCore US Development Kit

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Description	Price Each
694-101-0523	101-0523	RCM 3000 RabbitCore US Development Kit	

RCM3100 AND RCM3110 RABBITCORE

The RCM3100 RabbitCore microprocessor core module is the ideal option for designers who want to rapidly develop and implement embedded systems. Powered by the new Rabbit 3000™ microprocessor, the compact RCM3100 boasts powerful features and a small footprint–1.85" x 1.65" (47 x 42 mm)–to simplify integration.
The RCM3100 has 6 serial ports and operates at 29.4MHz and 3.3 V (with 5 V-tolerant I/O). Built-in low-EMI features, including a clock spectrum spreader, help designers eliminate the kind of emissions-related problems that frequently derail tight development schedules.

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0517	20-101-0517	F	RCM3100 RabbitCore Module	29.4	512K	512K	54	2-6		
694-20-101-0518	20-101-0518	F	RCM3110 RabbitCore Module	29.4	256K	128K	54	2-6		

RCM3100 RabbitCore US Development Kit

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Description	Price Each
694-101-0533	101-0533	RCM3100 US Development Kit	

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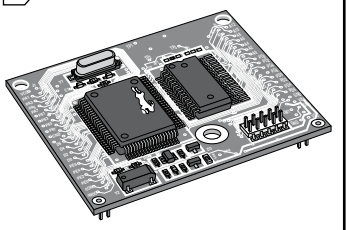

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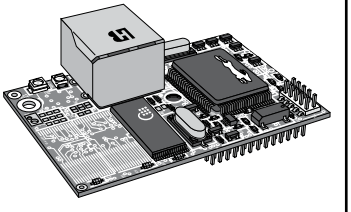

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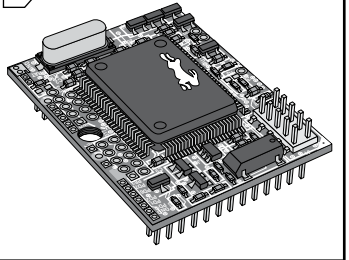

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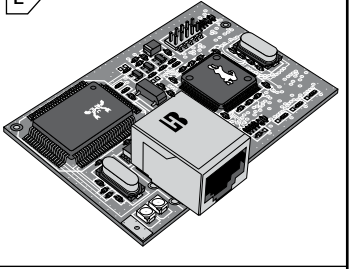

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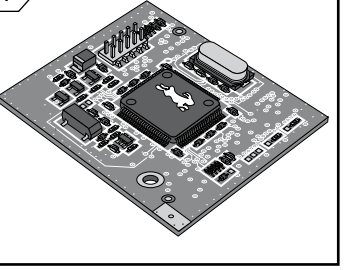

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RABBIT Core Modules and Development Kits

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RCM3200 AND RCM3220 RABBITCORE MODULES

The RCM3200 RabbitCore microprocessor core module is the ideal option for designers who want to rapidly develop and implement embedded systems with fully integrated 10/100Base-T Ethernet connectivity. Measuring only 2.73" x 1.85" (69 x 47mm), the RCM3200 operates at 3.3V (with 5 V-tolerant I/O), runs at up to 44.2MHz, and features 6 serial ports. Built-in low-EMI features, including a clock spectrum spreader, practically eliminate EMI problems, helping OEMs pass CE and regulatory RF emissions tests.

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	Data Flash	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0520	20-101-0520	A	RCM3200 RabbitCore Module	44.2	512K	512K	256K	52	2-6		
694-101-0522	101-0522	A	RCM3220 RabbitCore Module	44.2	512K	512K	256K	52	2-6		

RCM3200 RabbitCore US Development Kit

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Description	Price Each
694-101-0552	101-0552	RCM3100 US Development Kit	

RCM3305 AND RCM3315 RABBITCORE MODULES

The RCM3305 and RCM3315 microprocessor core modules are an ideal solution for designers who want to rapidly develop serial Flash and 10/100Base-T Ethernet into their embedded application. The RCM3305/3315 offer 4-8 MByte of serial Flash.

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	Data Flash	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-1067	20-101-1067	B	RCM3305 RabbitCore Module	44.2	512K	512K	512K	49	2-6		
694-20-101-1068	20-101-1068	B	RCM3315 RabbitCore Module	44.2	512K	512K	512K	49	2-6		

RCM3305 RabbitCore US Development Kit

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Description	Price Each
694-101-1069	101-1069	RCM3305 US Development Kit	

RCM3365 AND RCM3375 RABBITCORE MODULES

The RCM3365 and RCM3375 RabbitCore modules present a new form of embedded flexibility with removable "hot-swappable" memory cards. Supporting on-board 16MB NAND Flash as well as memory cards of up to 128 MB (sold separately), these RabbitCore modules are ideal for data intensive applications requiring low-power operation.

RoHS Compliant

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	Data Flash	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-1051	20-101-1051	C	RCM3365 RabbitCore Module	44.2	512K	512K	512K	52	2-6		
694-20-101-1055	20-101-1055	C	RCM3375 RabbitCore Module	44.2	512K	512K	512K	52	2-6		

RCM3400 AND RCM3410 RABBITCORE MODULES

The RCM3400 analog RabbitCore provides a known-good processor and analog input subsystem for OEMs to quickly integrate into custom designs. The RCM3400 features a low-EMI Rabbit 3000-based CPU subsystem running at 29.4 MHz, with 512K Flash / 512K SRAM or 256K Flash / 256K SRAM, 5 serial ports, and 8 channels of programmable gain analog input in an extremely small footprint (1.37" x 1.16" / 34 x 29mm).

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0561	20-101-0561	D	RCM 3400 RabbitCore Module	29.4	512K	512K	52	1-4		
694-20-101-0562	20-101-0562	D	RCM 3410 RabbitCore Module	29.4	256K	128K	52	1-4		

RCM3400 RabbitCore US Development Kit

For quantities of 10 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Description	Price Each
694-101-0587	101-0587	RCM 3400 RabbitCore US Development Kit	

RCM3600 AND RCM3610 RABBITCORE MODULES

The RCM3600 RabbitCore is the lowest priced Rabbit 3000 microprocessor based core module designed for a wide variety of applications.

Design Advantages:
- Ready-made platform for fast time-to-market, up to 3 months design integration time savings
- Compact size
- Dynamic C® development environment for real-time development and debugging
- Exceptionally fast performance for math, logic, I/O

Applications:
- Handheld devices & Instrumentation
- Remote Data Logging

RoHS Compliant

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0672	20-101-0672	E	RCM3600 RabbitCore Module	22.1	512K	512K	33	1-4		
694-20-101-0673	20-101-0673	E	RCM3610 RabbitCore Module	22.1	256K	128K	33	1-4		

RCM3700, RCM3710 AND RCM3720 RABBITCORE MODULES

The RCM3700 RabbitCore is the lowest priced Rabbit 3000 microprocessor based core module designed for Ethernet/Internet applications. Built-in low — EMI features, including a clock spectrum spreader, practically eliminate EMI problems, helping OEMs pass European CE and other regulatory RF emissions tests.

Applications:
- OEM Serial to Ethernet Products
- Remote Data Logging

RoHS Compliant

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	Data Flash	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-0674	20-101-0674	F	RCM3700 RabbitCore Module	22.1	512K	512K	1MB	33	1-4		
694-20-101-0675	20-101-0675	F	RCM3710 RabbitCore Module	22.1	256K	128K	1MB	33	1-4		
694-20-101-0961	20-101-0961	F	RCM3720 RabbitCore Module	22.1	512K	256K	1MB	33	1-4		

RCM3750 RABBITCORE MODULE

The RCM3750 features 10/100Base-T connectivity, 512K Flash / 512K SRAM, 4 serial ports, and an extremely small footprint (2.95" x 1.20" / 75 x 30mm). Extensive demo programs, application templates, and optional software modules enable rapid development of secure network embedded systems. Built-in low EMI features, including a clock spectrum spreader, practically eliminate EMI problems, helping OEMs pass European CE and other regulatory RF emissions tests.

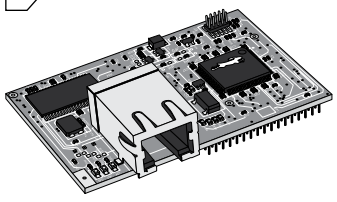
Applications:
- Remote Date Logging
- OEM Serial to Ethernet products
- Network-Enabling Security
- Acess Systems
- Building Automation
- Industrial Controls

RoHS Compliant

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.	Rabbit Semi Part No.	Fig.	Description	MHz	Flash	SRAM	Data Flash	GPIO	Serial Ports	Price Each 1	Price Each 50
694-20-101-1028	20-101-1028	G	RCM3750 RabbitCore Module	22.1	512K	512K	1MB	33	1-4		

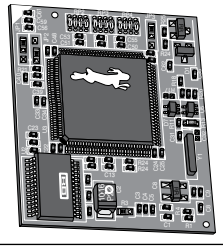
A



B

C

D



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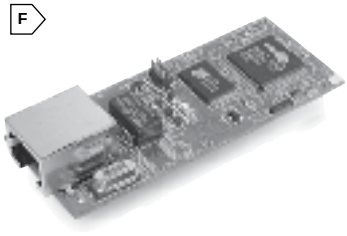

G

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RABBIT Core Modules and Development Kits

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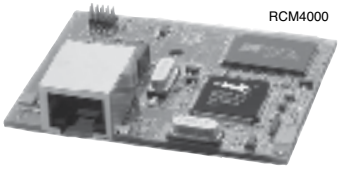
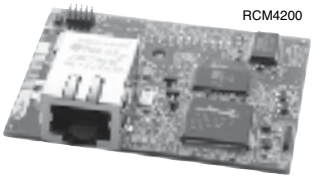
RCM4000 RABBITCORES – EMBEDDED NETWORKING AND CONTROL

The new Rabbit 4000 is a high-performance, low-EMI microprocessor designed specifically for embedded control, communications, and Ethernet connectivity. The Rabbit 4000 outperforms most 16–bit processors without losing the efficiency of an 8–bit architecture. Extensive integrated features, glueless architecture and 10Base-T Ethernet facilitate rapid hardware design, while a new C-friendly instruction set promotes efficient development of even the most complex applications.

The Rabbit RCM4XXX series of RabbitCore modules enable powerful embedded networking and control in a small package. RabbitCores mount directly onto a user designed motherboard, and can interface with CMOS-compatible digital devices via the user's motherboard. Programs are developed with our industry-proven Dynamic C development system that includes an editor, compiler, and in-circuit debugger.


RCM4000


RCM4200

Application Possibilities:

- Wireless device/data management
- Serial-to-Ethernet applications
- Remote monitoring and communications
- Web-enabling devices
- Device/data management and control
- Device-level control
- Remote data logging
- Asset management
- Security Access Systems

RCM 4000/4010 RabbitCore Modules w/ Ethernet

Specifications: • VDC = 3.0 to 3.6V

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.		MHz	Flash	SRAM	Data Flash	Serial Ports	GPIO	Price Each		
Mfr.	Mfr. Part No.							1	10	50
694—20-101-1094		59.98	512K	512K	32MB	1-4	19			
694—20-101-1112		59.98	512K	512K	- -	1-4	25			

RCM41XX RabbitCore RabbitCore Modules

Specifications: • VDC = 3.0 to 3.6V

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.		MHz	Flash	SRAM	Data Flash	Serial Ports	GPIO	Price Each		
Mfr.	Mfr. Part No.							1	10	50
694—20-101-1105		59.98	- -	512K	512K	1-4	29			
694—20-101-1093		29.49	512K	256K	- -	1-4	40			
694—20-101-1154		59.98	- -	512K	512K	1-4	40			

RCM42XX RabbitCore Modules

Specifications: • VDC = 3.0 to 3.6V

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.		MHz	Flash	SRAM	Data Flash	Serial Ports	GPIO	Price Each		
Mfr.	Mfr. Part No.							1	10	50
694—20-101-1131		58.98	512K	512K	512K	1-4	25			
694—20-101-1132		29.49	512K	512K	- -	1-4	35			

RCM4400W – THE ON-CORE WI-FI SOLUTION

The RCM4400W RabbitCore modules adds Wi-Fi/802.11b functionality to existing Rabbit® 4000 microprocessor features, allowing you to create a low-cost, low-power, Wi-Fi based control and communications solution for your embedded system. The RCM4400W RabbitCore modules are equipped with on-board Wi-Fi/802.11b wireless connectivity. Features also include 512K flash memory and fast-program execution SRAM, 35 general-purpose I/O, 3.3 V I/O line, and low-power modes.

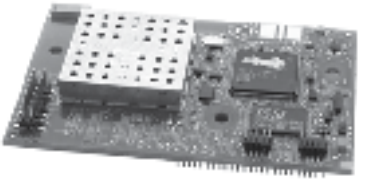
RCM4400W RabbitCore Module

For quantities of 100 and up, call for quote.

MOUSER STOCK NO.		Description	Price Each		
Mfr.	Mfr. Part No.		1	10	50
694—20-101-1202		Core Module Wi-Fi/802.11			

RCM4510W – THE ZIGBEE IS ON-BOARD

The RCM4510W next-generation RabbitCore module adds ZigBee®/802.15.4 connectivity to the existing Rabbit® 4000 microprocessor features allowing you to create a low-cost, low-power, wireless network as part of your control solution for your embedded application. The RCM4510W RabbitCore module is equipped with an on-board ZigBee/802.15.4 modem for wireless connectivity. Features also include 512K flash memory and SRAM, 40 general-purpose I/O, and up to 9 general-purpose I/O 4 of which can be set up as analog inputs via the ZigBee module.



RCM4510W RabbitCore Module

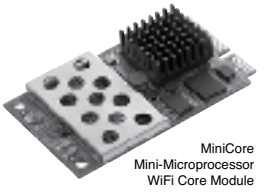
For quantities of 100 and up, call for quote.

MOUSER STOCK NO.		Description	Price Each		
Mfr.	Mfr. Part No.		1	10	50
694—20-101-1170		RCM4510W Core Module			

RCM5600W - MINI-MICROPROCESSOR WI-FI CORE MODULE

The MiniCore RCM5600W module offers 802.11b/g Wi-Fi connectivity which includes WPA2, WPA and WEP security standards, allowing easy integration and interoperability within Wi-Fi networks. With six serial ports, four configurable as SPI, the RCM5600W can easily embed into any existing or new design and is pin compatible with current and future MiniCore products.

A Development Kit offers the essential hardware tools and includes the Dynamic C® software development system. The Kit contains a prototyping and interface board with USB connections that will allow you to evaluate and debug the RCM5600W.


MiniCore
Mini-Microprocessor
WiFi Core Module

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.		Description	Price Each		
Mfr.	Mfr. Part No.		1	50	100
694—20-101-1265		MiniCore Mini-Microprocessor Wi-Fi Core Module			
694—101-1284		RCM5600W Standard Development Kit		-	-
694—101-1285		RCM5600W Deluxe Development Kit		-	-

MACHINE TO MACHINE (M2M) APPLICATION KIT

M2M (machine-to-machine/mobile) brings together **machine control with wireless communications**. With 50 billion "machines" in the world, M2M allows a machine to be monitored or controlled from anywhere, anytime, using current wireless data technologies such as GSM, SMS (text messaging) and GPRS.

Rabbit Semiconductor's M2M Applications Kit provides all the tools necessary to sample and design communications between a Rabbit-based device to a GSM/GPRS-enabled device (e.g. GSM modem/phone, PDA phone). The libraries and sample programs allow for a GSM modem/phone to send SMS (text) messages to a RabbitCore module (RCM) that can interpret messages as commands and in turn can execute control functions. The RCM can also send/receive email from any PC, device or phone. A menu system allows for easy interface on the keypad/display, as well as reading text messages and email. The M2M Application Kit includes Z-World's Dynamic C software with royalty-free TCP/IP stack and PPP module.

Machine2ME Node
Is a configuration involving an Ethernet-enabled Rabbit-based device at the heart of a Machine equipped with a GSM modem. The Rabbit-based device acts as a server/node to other Ethernet devices. So a single Rabbit device with a wireless modem can control a number of Ethernet devices.

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—101-0721		M2M Application Kit	

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RABBIT Microprocessors, Core Modules & Dev. Kits

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RABBIT 2000™ MICROPROCESSOR (30 MHZ)

The Rabbit 2000™ is a high-performance 8-bit microprocessor designed expressly to power a new generation of embedded systems. Its extensive integrated feature set and glueless architecture facilitate rapid hardware design, and its C-friendly instruction set permits efficient development of complex applications. For embedded systems, the Rabbit 2000 out-performs most 16 and some 32-bit processors without losing the efficiency of an 8-bit architecture. With clock speeds of up to 30 MHz and numerous on-chip peripherals including memory and I/O control signals for glueless interface, four serial ports, over forty digital I/O pins, 8 and 10-bit timer systems, watchdog timer, real-time clock and flexible clocking options, the Rabbit 2000 packs a hardware punch that system designers will appreciate. Our Dynamic C® development environment provides an integrated C compiler with debugger and linker for efficient and powerful applications development.

Design Advantages:

- 8-Bit Architecture
  High-performance architecture with integrated peripherals permit efficient and cost effective hardware design.
- Enhanced Instruction Set
  Brings new power and speed to 8-bit systems with numerous one-byte opcodes and 16-bit logical, arithmetic, and data transfer instructions.
- Exceptional Math Performance
  Based on highly optimized math libraries.
- Dynamic C® Development Environment
  For real-time development and debugging of Rabbit-based systems using C or Assembly language.
- TCP/IP Connectivity
  Full TCP/IP stack with source code is provided royalty free in Dynamic C.

Feature List:

- On-board slave port allows the Rabbit to be configured as an intelligent peripheral device.
- Control of clock speed by software allows dynamic trading of power vs. speed.
- Excellent math performance with 16 x 16 multiply in 12 clocks.
- Three levels of interrupt priority allow fast response to real-time events.
- 40 parallel I/O lines.
- 4 serial ports
- Five 8-bit timers and one 10-bit timer with two match registers
- Battery-backable time/date clock
- Watchdog Timers

✻Software available à la carte. See mouser.com/rabbitsemi

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.		Package	Price Each			
Mfr.	Mfr. Part No.		1	25	100	250
694—20-668-0003		PQFP-100 (Lead Free)				

Available Options and Accessories

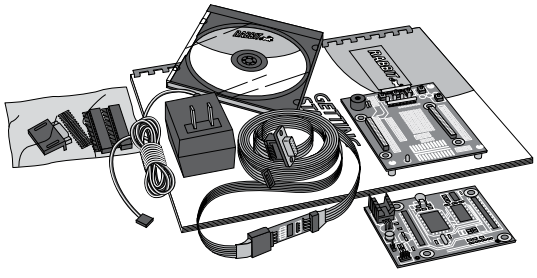
MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0589		Rabbit Cloning Board	
694—20-101-0467		8MB Serial Flash Expansion Boards	

RCM2000 RABBIT 2000™ DEVELOPMENT KIT

The RCM2000/Rabbit 2000 Development Kit includes a core module (model RCM2020 with Rabbit 2000® microprocessor, flash, SRAM, serial ports, digital I/O), Dynamic C® SE development software and documentation on CD-ROM (not a trial version!), prototyping board, power supply and serial programming cable. The RabbitCore 2000 is the foundation around which you can build a custom board based on the Rabbit 2000 microprocessor. It includes all the components that will jump-start your board design; general-purpose I/O, memory I/O interface, battery backup interface, master-slave control pins, five 8-bit timers (cascadable in pairs) and one 10-bit timer with two match registers, four CMOS-compatible serial ports, and up to 25.8MHz (see versions) clock for fast number crunching. Flash and SRAM are on-board, providing a development-ready memory interface.

Development Software:

The RCM2000/Rabbit 2000 Development Kit is ready for immediate software development. User programs are created using Dynamic C® SE a C language environment that includes an editor, compiler and debugger. Dynamic C SE is an enhanced version of the industry standard C programming language that is specifically tailored for control and embedded systems. Dynamic C SE includes Fast Fourier Transform functions, supports up to one megabyte of code and data and includes software drivers specific for the development kit. Programs can be compiled and executed using the Dynamic C software and a serial programming cable. No in-circuit emulator is required.



✻Software available à la carte. See mouser.com/rabbitsemi

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0404		RCM 2000 Core - 25.8 MHz, 512K SRAM	
694—20-101-0405		RCM 2010 Core - 25.8 MHz, 128K SRAM	
694—20-101-0383		RCM 2020 Core - 18.4 MHz, 128K SRAM	

Available Options and Accessories

694—20-101-0580		RabbitLink Card	
694—20-101-0589		Rabbit Cloning Board	
694—20-101-0467		8MB Serial Flash Expansion Board	

RCM2200 RABBIT 2000™ DEVELOPMENT KIT

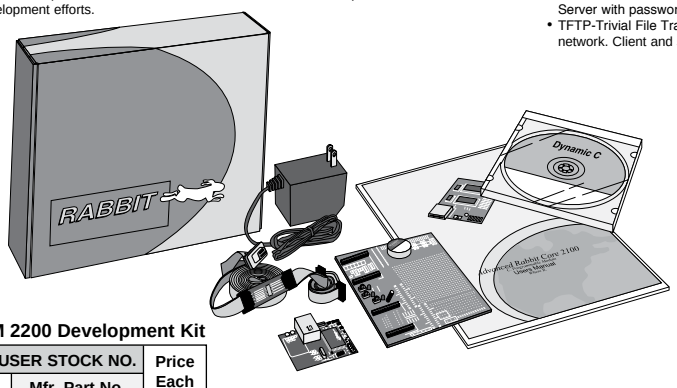
Jump start your design efforts with our most compact Ethernet core module. The RCM2200/Rabbit 2000 Development Kit includes a RCM2200 RabbitCore (with a Rabbit 2000® microprocessor with 22.1 MHz clock, 256K flash memory, 128K SRAM, Ethernet and serial ports, and digital I/O), prototyping board, power supply (U.S. sales only), Dynamic C® SE development software with TCP/IP stack and documentation on CD-ROM (not a trial version!), a PC serial cable, and a Getting Started manual. The RabbitCore RCM2200 is the foundation around which you can build a custom board based on the Rabbit 2000 microprocessor. It includes all the components that you need for fast and easy board design-26 parallel I/O lines, a memory-I/O interface, a battery-backup interface, master/slave control pins, five 8-bit timers (cascadable in pairs) and one 10-bit timer with two match registers, and four CMOS-compatible serial ports. Flash and SRAM are on-board and provide a development-ready memory interface. Full TCP/IP source code is provided in addition to the Dynamic C software on CDROM. ICMP, HTTP (includes facilities for SSI, CGI routines, cookies, and basic authentication), SMTP, FTP and TFTP (client and server) capabilities are provided. Ethernet drivers for the RealTek Ethernet chip are also included. Users can directly write to TCP or UDP sockets to develop custom applications. In addition, extensive demo programs are provided to assist with development. No run-time royalties are required, saving OEMs significant cost over the life of their application.

Key Benefits:

- Ethernet ready-port to an Ethernet chip is done for the Rabbit 2000 chip.
- Cost-effective-no run-time royalties.
- Simplified development-a complete Dynamic C® SE software package (with integrated editor, compiler and debugger) is provided. No in-circuit emulator required!
- A head start-sample demo programs, including HTTP web server and SMTP mail client, provide an advanced starting point for development.
- Quick development time-full hardware reference schematics help reduce development efforts.

TCP/IP Capability:

- Socket Level TCP-Transmission Control Protocol. Provides reliable full-duplex data transmission.
- Socket Level UDP-User Datagram Protocol. Simple protocol that exchanges datagrams without acknowledgements or guaranteed delivery.
- ICMP-Internet Control Message Protocol. Network layer Internet protocol reports errors and provides information relevant to IP packet processing.
- HTTP-Hypertext Transfer Protocol. The protocol used by Web browsers and Web servers to transfer files, such as text and graphic files. Includes facilities for Server Side Includes (SSI) and CGI routines.
- SMTP-Simple Mail Transfer Protocol. Internet protocol providing e-mail services.
- FTP-File Transfer Protocol. Application protocol, part of the TCP/IP protocol stack, used for transferring files between network nodes. Server with password support for file transfers between network nodes available on Rabbit 2000.
- TFTP-Trivial File Transfer Protocol. Simplified version of FTP that allows files to be transferred from one computer to another over a network. Client and server available on Rabbit 2000.



RCM 2200 Development Kit

MOUSER STOCK NO.		Price Each
Mfr.	Mfr. Part No.	
694—101-0475		

✻Software available à la carte. See mouser.com/rabbitsemi

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0454		RCM 2200 Core - 256K Flash, 128K SRAM, RJ-45	
694—20-101-0488		RCM 2210 Core - 256K Flash, 128K SRAM	
694—20-101-0494		RCM 2250 Core - 512K Flash, 512K SRAM, RJ-45	

Available Options and Accessories

694—20-101-0580		RabbitLink Card	
694—20-101-0589		Rabbit Cloning Board	
694—20-101-0467		8MB Serial Flash Expansion Board	
694—151-0113		Connector Adapter Board	

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RABBIT Microprocessors, Core Modules, & Dev. Kits

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RCM3100 RABBIT 3000 DEVELOPMENT KIT

The RCM3100 Development Kit includes an RCM3110 core module (with Rabbit 3000® microprocessor, Flash, SRAM, serial ports, and I/O ports), a prototyping board, Dynamic C® SE development software with documentation on CD-ROM (not a trial version), AC adapter (U.S. only), and serial cable for programming and debugging. The RCM3100 is ready for immediate software development. User programs are created using Dynamic C SE, a software development environment that includes an editor, compiler, and debugger. Programs are compiled and executed using Dynamic C and a programming cable - no costly in circuit emulator is required.

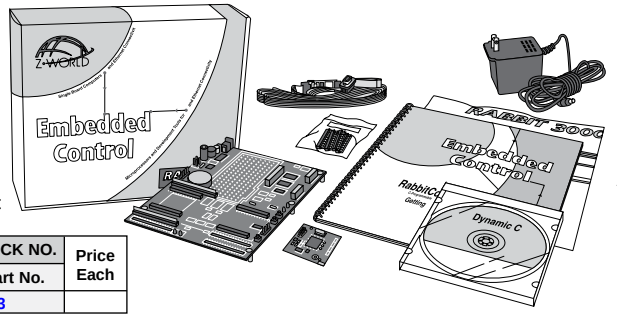
The prototyping board included in the kit allows for immediate evaluation and development of applications using the RCM3100. Executable code can be downloaded into Flash memory or SRAM. The prototyping board provides both 3.3 V and 5 V regulated power supplies, two RS-232 communication ports, two sockets for Rabbit RCM3100 Series modules, backup battery (supports RTC and SRAM), IrDA interface, and an interface for our optional keypad/display.

Features:

- 3.3 V and 5 V regulated power supplies
- Rabbit 3000 processor running at 29.4 MHz
- 54 parallel I/O (shared with peripheral features)
- 6 serial ports
- 256K Flash / 128K SRAM
- 11 built-in timers
- Real-time clock
- Watchdog timer

Key Benefits:

- Cost-effective - no run-time royalties
- Simplified development - A complete Dynamic C SE software package (with integrated editor, compiler, and debugger) is provided. No in-circuit emulator required!
- Sample demo programs provide an advanced starting point for development.
- Quick development time - Full hardware reference schematics help reduce development efforts.



RCM3100 Development Kit

MOUSER STOCK NO.		Price Each
Mfr.	Mfr. Part No.	
694—101-0533		

❊Software available à la carte. See mouser.com/rabbitsemi **For quantities of 10 and up, call for quote.**

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0517		RCM3100 RabbitCore Module - RoHS	
694—20-101-0518		RCM3110 RabbitCore Module - RoHS	

Add on Development Products

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0589		Rabbit Cloning Board - RoHS	
694—20-101-0467		8MB Serial Flash Expansion Board	
694—151-0113		Connector Adapter Board	

RCM3200 RABBIT 3000 DEVELOPMENT KIT

The RCM3200 Development Kit includes an RCM3200 core module (with Rabbit 3000® microprocessor, Flash, 2 SRAMs, serial ports, and I/O ports), a prototyping board, Dynamic C® SE development software with documentation on CD-ROM (not a trial version), AC adapter (U.S. only), and serial cable for programming and debugging. The RCM3200 is ready for immediate software development. User programs are created using Dynamic C SE, a software development environment that includes an editor, compiler, and debugger. Programs are compiled and executed using Dynamic C and a programming cable - no costly in circuit emulator is required.

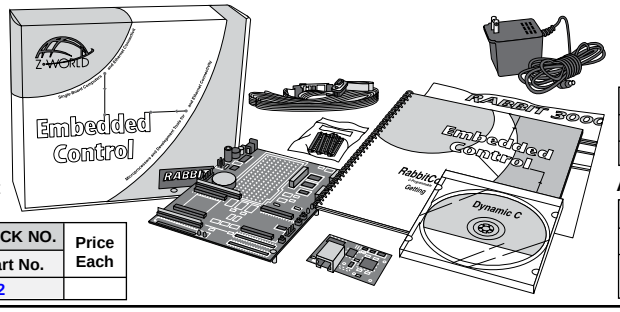
The prototyping board included in the kit allows for immediate evaluation and development of applications using the RCM3200. Executable code can be downloaded into Flash memory or SRAM. The prototyping board provides both 3.3 V and 5 V regulated power supplies, two RS-232 communication ports, two sockets for Rabbit RCM30/31/3200 modules, backup battery (supports RTC and SRAM), IrDA interface, and an interface for our optional keypad/display.

Features:

- 3.3 V and 5 V regulated power supplies
- Rabbit 3000 processor running at 44.2 MHz
- 52 parallel I/O (shared with peripheral features)
- 6 serial ports
- 512K Flash / 512K SRAM (program) & 256K SRAM (data)
- Ten 8-bit timers
- Real-time clock
- Watchdog timer

Key Benefits:

- Cost-effective - no run-time royalties
- Simplified development - A complete Dynamic C SE software package (with integrated editor, compiler, and debugger) is provided. No in-circuit emulator required!
- Sample demo programs provide an advanced starting point for development.
- Quick development time - Full hardware reference schematics help reduce development efforts.



RCM3200 Development Kit

MOUSER STOCK NO.		Price Each
Mfr.	Mfr. Part No.	
694—101-0552		

❊Software available à la carte. See mouser.com/rabbitsemi **For quantities of 10 and up, call for quote.**

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0507		RCM3200 RabbitCore Module - RoHS	

Add on Development Products

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0467		8MB Serial Flash Expansion Board	
694—151-0113		Connector Adapter Board	

RCM3400 RABBIT 3000 DEVELOPMENT KIT

The RCM3400 Development Kit includes an RCM3400 core module (512K Flash/512K SRAM), a development board with 10/100Base-T Ethernet and prototyping area, Dynamic C® SE development software with documentation on CD-ROM (not a trial version), AC adapter (U.S. only), and serial cable for programming and debugging. The RCM3400 is ready for immediate software development. User programs are created using Dynamic C SE, a software development environment that includes an editor, compiler, and debugger. Programs are compiled and executed using Dynamic C and a programming cable--no costly in circuit emulator is required.

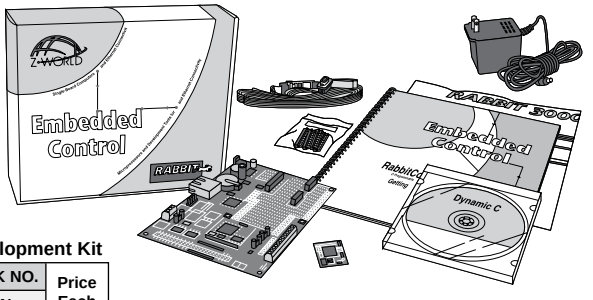
The development board included in the kit allows for immediate evaluation and development of applications using the RCM3400. Executable code can be downloaded into Flash memory or SRAM. The prototyping board provides 10/100Base-T Ethernet connectivity, both 3.3 V and 5 V regulated power supplies, two RS-232 and one RS-485 communication ports, one socket for a Rabbit RCM30/31/32/3400 module, one socket for a display or custom user device, backup battery (supports RTC and SRAM), IrDA interface, and an interface for our optional keypad/display.

Features:

- 3.3 V operation
- Powerful Rabbit 3000® microprocessor
- Low-EMI (typically <10 dB μV/m @ 3 m)
- Up to 512K Flash / 512K SRAM
- 8 channel 12-bit A/D with programmable gain
- 47 digital I/O, alternate I/O bus
- 5 serial ports (IrDA, SDLC/HDLC, asynch, SPI)
- MAC ID installed

Key Benefits:

- Cost-effective - no run-time royalties
- Simplified development - A complete Dynamic C SE software package (with integrated editor, compiler, and debugger) is provided with royalty-free TCP/IP stack.
- Sample demo programs provide an advanced starting point for development.
- Quick development time - Full hardware reference schematics help reduce development efforts.



RCM3400 Development Kit

MOUSER STOCK NO.		Price Each
Mfr.	Mfr. Part No.	
694—101-0587		

❊Software available à la carte. See mouser.com/rabbitsemi **For quantities of 10 and up, call for quote.**

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694—20-101-0561		RCM3400 RabbitCore Module - RoHS	
694—20-101-0562		RCM3410 RabbitCore Module - RoHS	

Add on Development Products

694—20-101-0541		Keypad/Display Unit in Plastic Case. Water-resistant remote keypad/display, 7-key/122 x 32 pixel LCD operating at 3.3V DC. (Cable not included, see below).	
694—20-101-0502		Keypad/Display Unit in Plastic Case, Water-Resistant Remote Keypad/Display, 7-Key/122x32 pixel LCD Operating at 5V DC. (Cable Not Included, See Below)	
694—540-0066		Keypad/Display Unit Cable. 20" cable for panel-mount keypad/display unit.	
694—20-101-0467		8MB Serial Flash Expansion Board	

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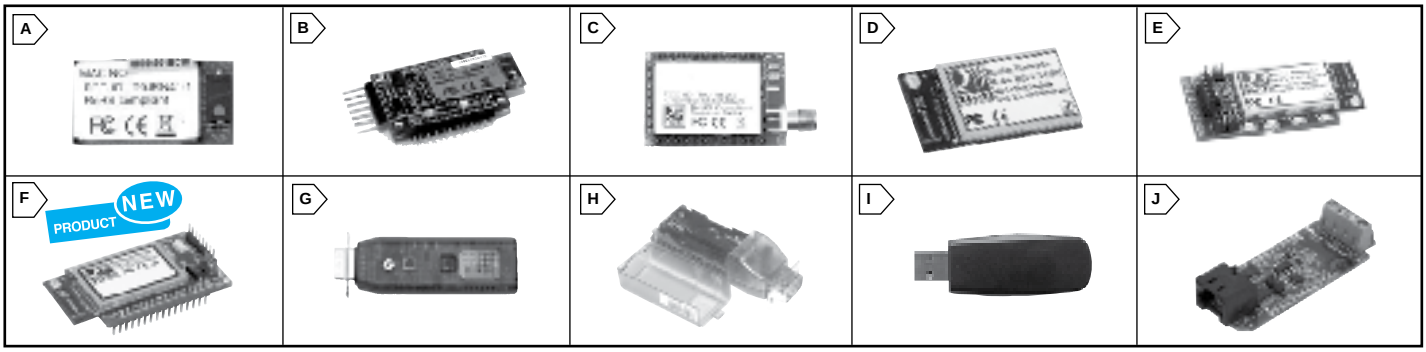
ROVING NETWORKS Adapters and Modules

RoHS Compliant **This product is RoHS compliant.**

ROVING NETWORKS EMBEDDED MODULES AND ADAPTERS



Bluetooth Modules

The RN-41 Class 1 module is available with on board chip antenna and is both FCC/CE certified and bluetooth SIG registered.
The RN-24 super module has voltage regulation, status LEDs, thru hole pins/headers, and chip (S) or SMA (E) Antenna options.

Features:

- Postage stamp sized modules, 15mm x 22mm
- Castellated SMT pads for easy and reliable PCB mounting
- Bluetooth v1.1, 1.2, and 2.0/ EDR compliant
- On board ceramic ANT(S) and external SMA ANT(E) versions
- On board bluetooth stacks/profiles make integration simple (no host code)
- Low power consumption, 1mA standby, 25mA connected
- Sustained data performance of >100kbps bi-directional
- Advanced features such as auto pairing and auto connect master
- Fully configurable with simple AT style commands locally over UART and remotely over Bluetooth
- Complete embedded solution, simplest mode requires only 4 pin connection (TX, RX, VCC, GND)

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Roving Networks Part No.	Fig.	Description	Range (meters)	Interfaces	Size (mm)	Price Each 1	5	10
765-RN-41	RN-41	A	Bluetooth v2.0+EDR Class 1	100	UART/USB	13.4x25.8x2			
765-RN-41-SM	RN-41-SM	B	Bluetooth v2.0+EDR Class 1 Socket Module	100	UART/RS232	28 x 40.8			
765-RN-24S	RN-24S	C	Bluetooth v2.0+EDR Supermodule w/ Chip Ant.	100	UART/RS485	38.1x25.4			
765-RN-24E	RN-24E	C	Bluetooth v2.0+EDR Supermodule w/ SMA Jack	100	UART/RS485	38.1x25.4			

WiFly™ 802.11b/g GSX Embedded Module

The new WiFly GSX Module is a stand alone, embedded wireless 802.11b/g WiFi module that uses 100m WATT when active and 10m WATT in sleep mode. This GSX Module incorporates a 2.4GHz radio, processor, TCP/IP stack, real-time clock, crypto accelerator, power management and analog sensor interfaces. Because of its small form factor and extremely low power consumption, the RN-131G is perfect for mobile wireless applications such as asset monitoring, GPS tracking and battery sensors. The RN-134 Super Module is built upon Roving Networks RN-131 WiFly GSX module. The RN-134 is a field ready, WiFi certified 802.11 b/g solution.

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Roving Networks Part No.	Fig.	Description	Frequency (MHz)	Number of Channels	Channel Intervals	Price Each 1	5	10
765-RN-131G	RN-131G	D	802.11b/g WiFi GSX Module - Industrial Temperature	2402-2480	1-14	5MHz			
765-RN-131C	RN-131C	D	802.11b/g WiFi GSX Module - Commercial Temperature	2402-2480	1-14	5MHz			
765-RN-131G-EVAL	RN-131G-EVAL	--	WiFly GSX 802.11b/g Development Kit	--	--	--			
765-RN-134	RN-134	E	WiFly GSX Super Module, RS232 and TTL signaling, status LEDs, 3-12 volt power regulators	2402-2480	1-14	5MHz			
765-RN-134-K	RN-134-K	--	Evaluation Kit with RN-134 WiFly GSX Super Module	--	--	--			

WiFly™ GX 802.11b/g Super Module

The WiFly GX module is a stand alone, embedded wireless LAN/WAN access device which simplifies the integration and development of your application by including an on board TCP/IP stack and networking application programs such as telnet and ftp The WiFly GX module uses a straight forward ASCII command set for configuration and programming. Once the WiFly GX is set up it can automatically associate and authenticate with a network, making your device accessible worldwide.

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Roving Networks Part No.	Fig.	Description	Frequency (MHz)	Number of Channels	Channel Intervals	Price Each 1	5	10
765-RN-121G	RN-121G	F	WiFi 802.11b/g Through Hole Module with UART & SPI Interfaces	2402-2480	1-14	5MHz			

Bluetooth™ Adapters

Roving Networks offers several serial adapters and sensors to integrate your embedded device, allowing access from wireless enabled PCs, PDAs, cellphones, and networks.

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Roving Networks Part No.	Fig.	Description	Price Each 1	5	10
765-RN-240M	RN-240M	G	Bluetooth to RS232 adapter with male connector			
765-RN-240F	RN-240F	G	Bluetooth to RS232 adapter with female connector			
765-RN-422M	RN-422M	G	Bluetooth to RS422 adapter with male connector			
765-RN-270M	RN-270M	H	Bluetooth to RS232 adapter, AAA battery powered with male connector			
765-RN-270M-K-US	RN-270M-K-US	H	Bluetooth to RS232 Serial Adapter Kit - US Version			
765-RN-270M-K-INT	RN-270M-K-INT	H	Bluetooth to RS232 Serial Adapter Kit - International Version			
765-RN-270F	RN-270F	H	Bluetooth to RS232 adapter, AAA battery powered with female connector			
765-RN-270F-K-US	RN-270F-K-US	H	Bluetooth to RS232 Serial Adapter Kit - US Version			
765-RN-270F-K-INT	RN-270F-K-INT	H	Bluetooth to RS232 Serial Adapter Kit - International Version			
765-RN-274M	RN-274M	H	Bluetooth to RS422 adapter, AAA battery powered with male connector			
765-RN-274M-K-US	RN-274M-K-US	H	Bluetooth to RS422 Adapter Kit - US Version			
765-RN-274M-K-INT	RN-274M-K-INT	H	Bluetooth to RS422 Adapter Kit - International Version			
765-RN-USB-X	RN-USB-X	I	Bluetooth 2.1 "driverless" USB dongle			
765-RN-USB-T	RN-USB-T	I	Bluetooth 2.0 USB dongle			
765-RN-800S-CB	RN-800S-CB	J	Bluetooth data acquisition and control module		--	--

ACCESSORIES

For quantities of 25 and up, call for quote.

MOUSER STOCK NO.	Roving Networks Part No.	Description	Price Each 1	5	10
765-RN-PS-US	RN-PS-US	Power Supply-5VDC 1A, 100-240VAC 50-60Hz auto sensing			
765-RN-PS-INT	RN-PS-INT	Power Supply-Includes connectors for North America, Europe, UK, and Australia/New Zealand			
765-RN-PS-USB	RN-PS-USB	Power Supply-Powers from USB Port			
765-RN-SMA-S	RN-SMA-S	1" Antenna, 2.4GHZ, Space Saver			
765-RN-SMA4-RP	RN-SMA4-RP	4" Reverse Polarity, Long Range Antenna			
765-RN-SMA-4	RN-SMA-4	Antenna with SMA Connector - 2.4GHZ Male 4", base can rotate to any angle for optimal positioning			
765-RN-UFL-SMA6	RN-UFL-SMA6	6" Coax Cable with UF.L and RPSMA Connnectors			
765-RN-USB-SERIAL	RN-USB-SERIAL	1 meter Smart USB 1.1 to RS232 Serial Cable			

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SILEX TECHNOLOGY Device Servers & Embedded Modules

Silex Technology Inc. provides networking and wireless solutions for virtually any printer, USB device, Serial device, as well as Embedded Wireless and Embedded Ethernet solutions. Silex products provide secure wireless and wired connectivity for a wide range of devices in a number of different applications, including medical, weights and measures, printers, enterprise and home networking, transportation, and much more.

WIRELESS/WIRED SERIAL DEVICE SERVERS

Silex serial device servers allow you to connect any RS-232 or UART-compatible serial device. They include a comprehensive TCP/IP protocol stack plus extensive management tools to make it easy to connect and manage multiple serial device servers over a network. For maximum flexibility, Silex offers both wireless serial device servers and serial to Ethernet (wired) device servers with external or embedded form factors.

SX-500

The SX-500 is an external 802.11b/g wireless or 10base-T/100base-T wired serial server with advantages such that include:

- Industry-leading security including WPA, WPA2, and WEP, plus 802.1x authentication with the most commonly used EAP types
- Easiest way to connect an existing RS-232 device to a wireless or wired network
- Rugged pre-plated galvanized steel enclosure with IP40 industrial grade rating

SX-550

The SX-550 is a powerful 802.11a/b/g wireless or 100base-T/10base-T wired embedded module with major competitive advantages like:

- Industry-leading security including WPA, WPA2, and WEP, plus 802.1x authentication with the most commonly used EAP types
- 802.11a capabilities for operation in the uncrowded 5GHz wireless band with more simultaneous users
- 4MB flash and 16MB RAM to handle the most complex applications

SX-550 Shown

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Silex Part No.	Description	Price Each			
			1	10	50	100
702-SX-500-1031	SX-500-1031	External 802.11b/g Serial Server, Single Port, US Power Supply				
702-SX-550-1701	SX-550-1701	Internal OEM Serial Server Module 10/100 + Wireless 802.11a/b/g, No Antenna or Cable				
702-SX-550-6900	SX-550-6900	SX-550 Serial Server Developers Kit (main module must be ordered seperately)		-	-	-

EMBEDDED WIRELESS MODULES

Silex offers both intelligent and radio-only embedded wireless modules to meet almost any wireless application. Their intelligent embedded wireless modules feature a complete TCP/IP networking stack plus the industry's most extensive wireless security, while their radio modules offer full 802.11a/b/g connectivity in mini PCI or SDIO form factors.

SX-10WAG/WG

Designed specifically for embedded applications, the Silex SX-10WAG and SX-10WG are Mini PCI radio modules that provide superior features such as:

- FCC Limited Modular Approval for simplification of OEM FCC testing requirements
- Meets a wide range of global regulatory certifications/standards
- Includes antenna with cable (no need to source separate antenna) and supports diversity antenna configurations

SX-560

The SX-560 is a powerful programmable 802.11a/b/g wireless embedded module with major competitive advantages like:

- Very low power consumption for applications like battery operated devices
- Linux operating system with user programmability
- Industry-leading enterprise security including WPA, WPA2, and WEP, plus 802.1x authentication with the most commonly used EAP types

SX-560 Shown

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Silex Part No.	Description	Price Each			
			1	10	50	100
702-SX-10WAG	SX-10WAG-US (GP)	MiniPCI Atheros 802.11a/b/g Radio Card, Includes Antenna and Cable				
702-SX-10WG	SX-10WG-US-(GP)	MiniPCI Atheros 802.11b/g Radio Card, Includes Antenna and Cable				
702-SX-560-6900	SX-560-6900	SX-560 Serial Server Developers Kit (main module must be ordered separately)		-	-	-

PRINT AND USB DEVICE SERVER

Silex MFP/AIO print servers are the only print servers designed specifically to handle all types of USB printers, including virtually any inkjet, multifunction peripheral, or all-in-one printer. This capability is made possible by Silex's SX Virtual Link software, which exactly emulates a hardwired USB port and thereby ensures compatibility with virtually any printer driver.

The SX-2000WG features 802.11b/g wireless capabilities to allow you to locate your high-speed USB printer anywhere in your home or office. Its advantages include:

- Virtual Link software for compatibility with almost any Inkjet /MFP/AIO USB printer
- Transparent operation with your Windows and MacOS X applications
- Can connect up to 14 additional USB devices (scanners, network storage, etc) to the network

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Silex Part No.	Description	Price Each			
			1	10	50	100
702-SX-2000WG	SX-2000WG+	USB 2.0 High-Speed Wireless Print Server				

ETHERNET CONVERTERS

Silex's Ethernet converters make it easy for you to migrate your existing Ethernet devices into new environments. Simply plug the converter into your device, and you're up and running on your new network in minutes with no software modifications required.

SX-2600CV

The SX-2600CV is an IPv4 to IPv6 converter that ensures that your Ethernet devices will be compatible with current and future TCP/IP networks. Its advantages include:

- Makes existing network devices operable in IPv6 environments
- Works in environments that support both IPv4 & IPv6
- Easy to install and use with software transparent operation devices will be compatible with current and future TCP/IP networks.

SX-2600CV Shown

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Silex Part No.	Description	Price Each			
			1	10	50	100
702-SX-2600CV	SX-2600CV	IPv4 to IPv6 Converter				

ACCESSORIES

For quantities of 250 and up, call for quote.

MOUSER STOCK NO.	Silex Part No.	Description	Price Each			
			1	10	50	100
702-108-00016-050	108-00016-050	2.4/5GHz External Antenna for SX-10WAG, SX-550, and SX-560				
702-131-00033-50	131-00033-50	U.FL to RP-SMA 5.1 in Cable with FCC ferrite beads for 108-00016-050 External Antenna				
702-131-20110-050	131-20110-050	U.FL to RP-SMA 4.6 in Cable for 108-00016-050 External Antenna				
702-131-20110-050	131-20110-050	U.FL to RP-SMA 4.6 in Cable for 108-00016-050 External Antenna				
702-128-00193-100	128-00193-100	2.4/5GHz Internal Antenna for SX-510, SX-550 and SX-560				
702-131-00032-050	131-00032-050	U.FL to U.FL Cable for 128-00193-100 Internal Antenna				

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CONGATEC Computer-On-Modules

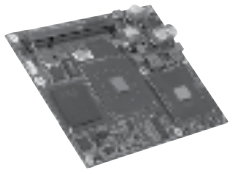
congatec
the rhythm of embedded computing

RoHS Compliant **This product is RoHS compliant.**

CONGA-CA COM EXPRESS COMPACT MODULE BASED ON INTEL® ATOM™ PROCESSOR Z5XX SERIES

The Industry's First COM Express Module Based on Intel's Menlow Platform

The conga-CA is a COM Express™ Type 2 pinout module that features Intel® Atom™ Z5xx series processors with an Intel® System Controller Hub US15W in a compact 95x95mm size form factor. All congatec boards are equipped with the company's embedded BIOS, including a board controller that enhances embedded features such as system monitoring, watchdog timer and the I2C bus. With the ability to isolate itself from the main x86 processor, these features are also available in stand-by mode, hence promoting further power saving functionality



RoHS Compliant

The conga-CA is equipped with the congatec Embedded BIOS and supports the following features:

- ACPI 3.0 Power Management
- ACPI Battery Support
- Supports Customer Specific CMOS Defaults
- Multistage Watchdog
- User Data Storage
- Manufacturing Data and Board Information
- OEM Splash Screen
- Flat Panel Auto Detection
- BIOS Setup Data Backup
- Fast Mode I²C Bus
- Real Headless Operation

conga-CA

MOUSER STOCK NO.	congatec Part No.	Article Description	Description	Price Each 1	Price Each 5
787-87477	87477	conga-CA/Z510-512	Intel® Atom™ Z510 processor 1.1GHz, 512kB L2-Cache, 400MHz FSB and 512MB DDR2		
787-61125	61125	conga-CA/Z530-1G	Intel® Atom™ Z530 processor 1.6GHz, 512kB L2-Cache, 533MHz FSB and 1GB DDR2		
787-99881	99881	conga-CA/Z510-512 PCIe	Intel® Atom™ Z510 processor 1.1GHz, 512kB L2-Cache, 400MHz FSB and 512MB DDR2		
787-33321	33321	conga-CA/Z530-1G PCIe	Intel® Atom™ Z53we0 processor 1.6GHz, 512kB L2-Cache, 533MHz FSB and 1GB DDR2		
787-61788	61788	conga-CA/HSP-T	Heatspreader for conga-CA, with M2.5 mm threaded stand-offs		
787-55441	55441	conga-CA/HSP-B	Heatspreader for conga-CA, with 2.7 mm non-threaded stand-offs		---
conga-CA945					
787-62626	62626	conga-CA945/N270	Intel® Atom N270 (SC) 1.6GHz CPU, 512kB L2-Cache und 533MHz FSB, supports up to 2GB SO-DIMM DDR2 533MT/s PC2-4200 physical memory		
787-21441	21441	conga-CA945/HSP-B	Standard heatspreader for COM Express Compact module conga-CA945. All stand-offs are with 2.7mm bore hole		
787-22581	22581	conga-CA945/HSP-T	Standard heatspreader for COM Express Compact module conga-CA945. All stand-offs are M2.5mm threaded		
conga-BA945					
787-41400	41400	conga-BA945/N270	COM Express Basic module with Intel 945GME and Intel Atom N270 with 1.6GHz, 512kb L2-Cache and 533MHz FSB		
787-42755	42755	conga-BA945/HSP-B	Heatspreader for COM-Express-Basic-Module conga-BA945/N270 Standoff with 2.7mm bore hole		
787-42750	42750	conga-BA945/HSP-T	Heatspreader for COM-Express-Basic-Module conga-BA945/N270 Standoff with 2.5mm thread		

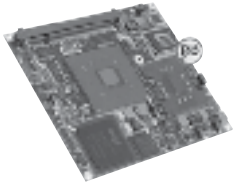
Engineering Tools / Accessories for COM Express

MOUSER STOCK NO.	congatec Part No.	Article Description	Description	Price Each
787-29874	29874	conga-SBM²C	Starterkit to evaluate SBM-Features for COM Express with SMART-Battery Manager Module and cable set	
787-057880	57880	conga-IVI Starterkit	Starterkit to evaluate SBM-Features for COM Express with SMART-Battery Manager Module and cable set	

XTX EMBEDDED CPU MODULES WITH 4 PCI EXPRESS LANES AND SATA

The conga-X915 features Intel® Pentium® M processors up to 2.0 GHz with 2 MByte cache. Compared to the conga-X852 the conga-X915 offers an additional 4x X1 PCI Express lanes for extremely fast I/Os.

RoHS Compliant



The conga-B945 is equipped with the congatec Embedded BIOS and supports the following features:

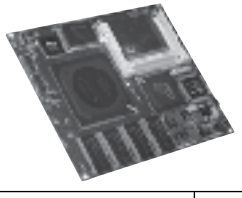
- ACPI Power Management
- ACPI Battery Support
- Supports Customer Specific CMOS Defaults
- Multistage Watchdog
- Manufacturing Data and Board Information
- User Data Storage
- OEM Splash Screen
- Flat Panel Auto Detection
- BIOS Setup Data Backup
- Fast Mode I²C Bus
- Real Headless Operation
- Console Redirection and BIOS Update (flasing BIOS) via Serial Port

XTX congatec-X945/X915 CPU Modules

MOUSER STOCK NO.	congatec Part No.	Article Description	Description	Price Each 1	Price Each 10	Price Each 25
787-34571	34571	conga-X945/423	Intel 945GME chipset and Intel Celeron M 423 ULV-CPU with 1.06GHz 1 MB L2-Cache and 533Mhz FSB			
787-14781	14781	conga-X945/U7500	Intel 945GME chipset and Intel Core2Duo U7500 ULV-CPU with 1.06GHz 2 MB L2-Cache and 533Mhz FSB			
787-55874	55874	conga-X945/L7400	Intel 945GME chipset and Intel Core2Duo L7400 LV-CPU with 1.5Ghz 2 MB L2-Cache and 667Mhz FSB			
787-13410	13410	conga-X915/CM600-512 eco	Intel 910GMLE chipset & Intel Celeron M w/ 600MHz 512 kB L2-Cache & 400Mhz FSB			
Accessories						
787-87412	87412	DDR2-SODIMM-667 (1024MB)	1 GByte DDR2 SODIMM memory module			
787-68712	68712	DDR2-SODIMM-667 (2048MB)	2 GByte DDR2 SODIMM memory module			
787-62579	62579	conga-X915+X945/HSP-B	Heatspreader for conga-X915 and conga-X945 Standoff with 2.7mm bore hole			
787-11278	11278	conga-X915+X945/HSP-T	Heatspreader for conga-X915 and conga-X945 Standoff with M2.5mm thread			
787-88741	88741	conga-X915+X945/CSA-B	Standard active cooling solution for XTX modules conga-X915/X945 surface black w/ 10mm fins integrated 12V fan 5500rpm w/3 pin 2.54 pitch connector bore hole standoffs			
787-36198	36198	conga-X915+X945/CSA-T	Standard active cooling solution for XTX modules conga-X915/X945 surface black w/ 10mm fins integrated 12V fan 5500rpm w/3 pin 2.54 pitch connector thread standoffs			
787-24873	24873	conga-X915+X945/CSP-B	Standard passive cooling solution for XTX modules conga-X915/X945 surface black w/ 10mm fins bore hole standoffs			
787-73258	73258	conga-X915+X945/CSP-T	Standard passive cooling solution for XTX modules conga-X915/X945 surface black w/ 10mm fins thread standoffs			
Evaluation Kits						
787-19482	19482	conga-Xeval	Evaluation baseboard for XTX-modules			
787-77441	77441	conga-XKIT	XTX-Starterkit with XEVAL Xdebug XDVI Power supply CD-ROM USB-Stick with 128 MB Without XTX-module			
787-57891	57891	conga-ITX/X	Baseboard for XTX-modules. Formfactor mini-ITX			
787-26571	26571	conga-SBM²-KIT	Starterkit to evaluate SBM-Features w/SMART-Battery Manager Module & cable set			

ETX® EMBEDDED COMPUTER MODULE BASED ON AMD GEODE LX 800

The conga-ELX features all ETX® interfaces including the ISA bus. Although the AMD LX 800 processor has no direct ISA support, the ISA Bus is generated by an additional PCI2ISA bridge.



RoHS Compliant

The conga-B945 is equipped with the congatec Embedded BIOS and supports the following features:

- Supports Customer Specific CMOS Defaults
- Multistage Watchdog
- Manufacturing Data and Board Information
- User Data Storage
- OEM Splash Screen
- Flat Panel Auto Detection
- BIOS Setup Data Backup
- Fast Mode I²C Bus
- Real Headless Operation

ETX® congatec-ELXeco Module

MOUSER STOCK NO.	congatec Part No.	Article Description	Description	Price Each 1	Price Each 10	Price Each 25
787-85431	85431	conga-ELXeco-256-LVDS	AMD LX 800 w/ onboard 256MB RAM & LVDS-graphics interface. w/ 500MHz 128kB L2-Cache ISA-bus via PCItoISA-Bridge			
Accessories						
787-45458	45458	conga-ELX/Deep Drawn HSP-B	Deep drawn stamped Heatspreader for conga-ELXecowith 2.7mm bore hole			
787-66558	66558	conga-ELX/Deep Drawn HSP-T	Deep drawn stamped Heatspreader for conga-ELXeco with 2.5mm thread			

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Single Board Computers

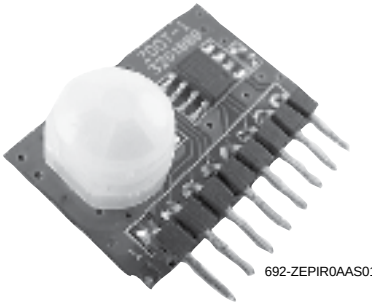
Products may be RoHS compliant. Check mouser.com for RoHS status.

zilog® EPIR MOTION DETECTION ZDOTS SINGLE BOARD COMPUTER (SBC)

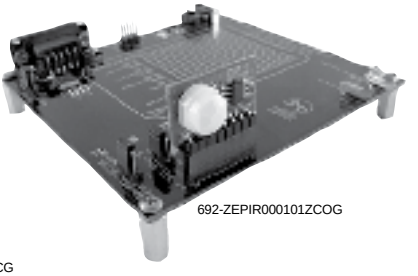
(SBC) is a complete solution for motion detection. ePIR Motion Detection Zdots SBC includes a passive infrared (PIR) sensor and Fresnel lens and provides a significant performance improvement over today's digital solutions. Using PIR sensor technology, it combines the unique features of the Z8 Encore! XP® MCU, including Zilog's Sigma-Delta TechnologyTM, with powerful, new motion detection algorithms, providing a dramatic improvement in both sensitivity and stability.

The ePIR Motion Detection Zdots Single Board Computer is a great time-to-market embedded solution for any device that needs motion detection. It is an easy way to add energy management capability to various applications including vending machines, display systems, appliances, lighting control, access control and general purpose proximity sensing.

Advantages:
- Fast validation of prototypes.
- Enables fast time-to-market through quick development.
- Drop-in-ready solution for production.
- Reduced overall BOM costs.
- Zdots! Single Board Computing.
- Zdots! Single Board Computers enable rapid embedded application development shrinks time to market, slashes BOM costs, and seamlessly drops into production systems.



692-ZEPIR0AAS01SBCG

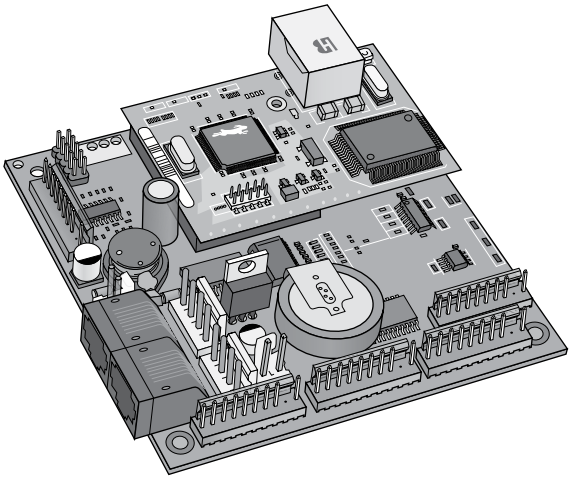


692-ZEPIR000101ZCOG

MOUSER STOCK NO.	Zilog Part No.	Description	Price Each	
			1	100
692-ZEPIR0AAS01SBCG	ZEPIR0AAS01SBCG	Zdots® ePIR Motion Detection Single Board Computer		
692-ZEPIR000101ZCOG	ZEPIR000101ZCOG	Zdots® ePIRMotion Detection Single Board Computer Development Kit		-

RABBIT Semiconductor BL2500 COYOTE

Gives OEM designers extremely low-cost embedded control for high-volume applications such as product control, factory equipment control, access control, HVAC, and vending machines. Two standard models—one with Ethernet, one without—feature the Rabbit 3000™ microprocessor at 29.4 MHz, with 256K Flash and 128K SRAM.



RoHS Compliant ✻

Complete Kits For New Users

MOUSER STOCK NO. Mfr.	MOUSER STOCK NO. Mfr. Part No.	Description	Price Each
812	—101-0577	Jump start your evaluation and design efforts with a complete development kit, which includes BL2500 Coyote, demonstration board, Dynamic C development system and complete documentation CD-ROM, serial cable for programming and debugging.	

Product Only

✻ RoHS Compliant † Requires 1.27mm programming cable

MOUSER STOCK NO. Mfr.	MOUSER STOCK NO. Mfr. Part No.	Description	Price Each
✻812	—20-101-0575	BL2500 10Base-T Ethernet	
812	—20-101-0599	BL2500 with 512K/512K	
✻812	—20-101-0602	BL2500 with 10/100, 512K/512K, 44.2clk †	
✻812	—20-101-0576	BL2510 No Ethernet	

Expansion Boards

✻ RoHS Compliant

MOUSER STOCK NO. Mfr.	MOUSER STOCK NO. Mfr. Part No.	Description	Price Each
✻812	—20-101-0616	RabbitNet A/D Expansion Card	
✻812	—20-101-0612	RabbitNet Digital I/O Expansion Card	
✻694	—20-101-0467	8 Meg Serial Flash	
✻812	—20-101-0879	RN1600 RabbitNet Keypad/Display Interface Card	

Programming/Development Tools

✻ RoHS Compliant

MOUSER STOCK NO. Mfr.	MOUSER STOCK NO. Mfr. Part No.	Description	Price Each
✻ 694	—20-101-0580	RabbitLink Card	
✻ 694	—20-151-0178	RS-232-to-USB Converter Cable	
538	—63811-1000	Crimp Tool	
✻ 694	—20-101-0542	1.27 mm Programming Cable	
✻ 812	—20-101-0581	Connectivity Kit	
812	—101-0887	RN1600 RabbitNet Expansion Kit	

Specifications:

Feature	BL2500	BL2510
Microprocessor	Rabbit 3000™ at 29.4 MHz	
Ethernet Port	10Base-T, RJ-45	N/A
Flash Memory	256K (standard)	
SRAM	128K (standard)	
LED's	4-User-programmable	
Digital Inputs	16: 15 protected to ±36 VDC, 1 protected to +5 –36V; threshold is 1.5 V nom.	
Digital Outputs	8, sink up to 200 mA each, 36 V DC max. standoff voltage	
Analog Inputs	One 10-bit resolution, 8-bit accuracy, input range 0.1–3.1 V, 10 samples/s	
Analog Outputs	Two 9-bit PWM, 0.1–3.1 VDC, 17ms settling time	
Serial Ports	6 serial ports: 1 RS-485, 2 RS-232 or one RS-232 (with CTS/RTS), 1 CMOS level asynchronous or clocked serial port, 1 expansion serial port multiplexed to two RS-422 clocked SPI ports, 1 CMOS compatible serial port for programming/debug	
Serial Rate	Max. async = CLK/8, Max. sync = CLK/2	
Real-Time Clock	Yes	
Timers	Ten 8-bit timers (6 cascadable from the first) and one 10-bit timer with 2 match registers	
Watchdog/Supervisor	Yes	
Power	8 – 40 V DC 1 W typical w/ no load	8 – 40 V DC 0.8 W typical w/ no load
Backup Battery	3 V lithium coin-type, 1000 mA•h, supports RTC & SRAM	
Operating Temperature	-40° to +70°C	
Humidity	5 – 95%, noncondensing	
Connectors	5 polarized 9-pin Molex® type terminals with 0.1" pitch, Two 4-pin 0.156" pitch Molex type, two 0.156" pitch 2-pin Molex type, two RJ-45, one 0.1" pitch 2x5 IDC, one 2 mm pitch 2x5 IDC programming port	
Board Size	3.95" x 3.95" x 1.16" (100 x 100 x 29 mm)	3.95" x 3.95" x 0.80" (100 x 100 x 20 mm)

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RABBIT Single Board Computers

Specifications: * 13–36 V DC supply voltage required

Feature	BL2100 SMARTCAT				BL2000 WILDCAT				BL2600 WOLF	
	BL2100	BL2110	BL2120	BL2130	BL2000	BL2010	BL2020	BL2030	BL2600	BL2610
Microprocessor	Rabbit 2000™ @ 22.1MHz								Rabbit 3000™ at 44.2MHz	Rabbit 3000™ at 29.4MHz
Ethernet PorNone	10Base-T, RJ-45, link and activity LEDs		None		10Base-T, RJ-45, link and activity LEDs		None		10/100Base-T, 3 LEDs	None
Flash	256K								512K (standard)	
SRAM	128K								512K Program Execution, 256K Data	512K (standard)
Backup Battery	Socketed 3-V lithium coin-type, 265 mA•h, supports RTC and SRAM								Panasonic CR2477 or equivalent 3V lithium coin type, 950mAh, socket mounted	
Keypad/Display	See keypad/display options and our "OP" products (for serial display options)				See our "OP" products for serial display options				-	
Digital Intputs	24: protected to ± 36VDC				11: protected to ±36VDC				16: Hardware-configurable pull-up or pull-down, ±36VDC, switching threshold 1.4V typ.	
Digital Outputs	16: source/sink 200 mA each, 36VDC max.				8: sink 200mA, 2: sink 750mA, 40VDC max.				-	
Analog Inputs	11 at 1 MΩ, 12-bit resolution, ±10 VDC, up to 4,100 samples/sec	None	11 at 1 MΩ, 12-bit resolution, ±10 VDC, up to 4,100 samples/sec	None	Four 12-bit resolution 1MW, ±10VDC, up to 4,000 samples/sec.	Four 10-bit resolution 1MW, ±10VDC, up to 4,000 samples/sec.	Four 12-bit resolution 1 MW, ±10 VDC, up to 4,000 samples/sec.	Four 10-bit resolution 1MW, ±10VDC, up to 4,000 samples/sec.	8 channels with 11-bit resolution, software selectable ranges Unipolar: 1, 2, 2.5, 5, 10, 20VDC; Bipolar: ±1, ±2, ±5, ±10VDC; Four of the eight channels maybe hardware-configured for 4-20mA, 12 kHz update rate	
Analog Outputs	Four 12-bit resolution, 0-10 VDC*, update rate 12kHz	None	Four 12-bit resolution, 0-10 VDC*, update rate 12kHz	None	Two 12-bit resolution, 0–4VDC, update rate 12kHz	None	Two 12-bit resolution, 0–4VDC, update rate 12kHz	None	4 channels, 12-bit resolution, buffered (0-10 V DC, ± 10VDC), 4-20mA, 12kHz update rate	
Analog or Digital Inputs	None				5 at 12kW, 12-bit resolution, 0–48VDC	7 at 12kW, 10-bit resolution, 0–48VDC	5 at 12kW, 12-bit resolution, 0–48VDC	7 at 12kW, 10-bit resolution, 0–48VDC	-	
Relay Outputs	None				SPDT, 1 A@ 30VDC, 0.3 A@ 120VAC Uses 1 digital output				-	
Serial Ports	4 total: two 3-wire (or one 5-wire) RS-232, 1 RS-485, and one 5V CMOS-compatible (programming)								Up to 5 serial ports: • 1 RS-485 or 1 RS-232 • 2 RS-232 or one RS-232 (with CTS/RTS) • 1 clocked serial port multiplexed to 2 RS-422 SPI master ports • 1 CMOS compatible serial port for programming/debug	
Serial Rate	Max. burst rate = CLK/32 Max. sustained rate = burst/2								-	
Real-Time Clock	Yes								-	
Timers	Five 8-bit timers (four cascadable from the first) and one 10-bit timer with 2 match registers								-	
Watchdog/Supervisor	Yes								-	
Power	9-36VDC, 1.5W max. (w/o display), 3W max. (w/ display)				9-40VDC or 24VAC ±10%, 1.5W max., power jack				-	
Board Size	4.14" x 3.41" x 0.93" (105 x 87 x 24mm)				3.43" x 4.15" x 0.82" (87 x 105 x 21mm)				4.85" x 4.96" x 1.00" (123 x 126 x 25mm)	

BL2100 SMARTCAT

⁎RoHS Compliant

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Price Each
⁎	812—20-101-0461	BL2100 Analog and Ethernet	
	812—20-101-0568	BL2100 with 512K/512K	
⁎	812—20-101-0566	BL2100 Friction Lock Connectors	
⁎	812—20-101-0462	BL2110 Ethernet, no Analog	
	812—20-101-0572	BL2110 512K Flash	
	812—20-101-0463	BL2120 Analog, no Ethernet	
⁎	812—101-0570	BL2120 Friction Lock Connectors	
⁎	812—20-101-0569	BL2120 Bottom Mount Sockets	
	812—20-101-0546	BL2130 Bottom Mount Connectors	
Product Options & Accessories, Expansion Boards, Mounting / Display			
⁎	694—20-101-0513	2mm Programming Cable	
⁎	694—20-101-0467	8 Meg Serial Flash	
⁎	694—20-101-0465	Keypad/Display Unit	
	812—151-0127	Panel-Mount Keypad/Display Unit	
	812—20-101-0466	Keypad/Display Unit w/Case	
	694—540-0066	Keypad/Display Unit Cable 20'	
⁎	812—20-101-0495	Baseplate	

BL2000 WILDCAT

⁎RoHS Compliant

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Price Each
⁎	812—101-0472	Wildcat Tool Kit (board not included)	
⁎	812—20-101-0430	BL2000 Ethernet, Analog I/O	
⁎	812—20-101-0555	BL2000 Friction Lock Connectors	
⁎	812—20-101-0455	BL2010 Ethernet, Analog inputs only, 2 extra dual purpose	
	812—20-101-0591	BL2010 Friction Lock Connectors	
⁎	812—20-101-0456	BL2020 No Ethernet, Analog I/O	
	812—20-101-0594	BL2020 Friction Lock Connectors	
⁎	812—20-101-0457	BL2030 No Ethernet, Analog inputs only, 2 extra dual	
Product Options & Accessories, Expansion Boards, Mounting / Display			
	694—20-101-0580	RabbitLink Card	
	694—20-151-0178	RS-232 to-USB Converter Cable	
⁎	694—20-101-0467	8 Meg Serial Flash	
⁎	812—20-101-0431	Unibox Enclosure	
⁎	812—151-0075	Light Pipes	
	812—20-101-0495	Baseplate	

BL2600 WOLF BOARD

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Price Each
	812—20-101-0889	BL2600 Board w/ 10/100Base-T Ethernet - RoHS	
	812—20-101-0891	BL2610 Board w/o 10/100Base-T Ethernet - RoHS	
Product Accessories			
	812—20-101-0879	RN1600 RabbitNet Keypad/Dsply Interface Card-RoHS	
	812—20-101-0688	RN1300 RabbitNet D/A Expansion Card	
	812—20-101-0616	RN1200 RabbitNet Digital I/O Expansion Card	
	812—20-101-0612	RN1100 RabbitNet Digital I/O Expansion Card	
	694—20-101-0468	SF1000 4MB Serial Flash Expansion - RoHS	
	694—20-101-0467	SF1000 8MB Serial Flash Expansion	
	694—20-101-0580	RabbitLink Card for Remote Debug via Ethernet/Internet - RoHS	
	694—20-151-0178	RS-232-to-USB Converter Cable for USB only PCs	
	694—20-101-0542	1.27mm Connector for 10/100Base-T Option	
	812—20-101-0581	Connectivity Kit	

SR9000 SMART START SYSTEM

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Price Each
Smart Start Backplane			
	812—20-101-0512	SR9010 7-slot - RoHS	
	812—20-101-0487	SR9050 3-slot	
Keyboard/Display Options			
	694—20-101-0601	Keypad/Display Unit, 3.3 Volt, No Case - RoHS	
	694—20-101-0465	Keypad/Display Unit, 5 Volt, No Case	
Product Options and Accessories			
	812—101-0504	Cable and Mounting Hardware	
	812—540-0069	Keypad/Display Unit Cable 5"	
	812—151-0127	Connector Adapter Board	
Smart Start CPU Card			
	812—20-101-0486	SR9150 Ethernet - RoHS	
	812—20-101-0738	SR9150 Ethernet, 512K SRAM - RoHS	
	812—20-101-0506	SR9160	
Programming/Development Tools			
	694—20-101-0580	RabbitLink Card	
Smart Start Digital I/O Cards			
	812—20-101-0389	16 inputs and 8 outputs, sinking	
	812—20-101-0437	16 inputs and 8 outputs, sourcing - RoHS	
	812—20-101-0390	8 inputs and 16 outputs, sinking - RoHS	
Smart Start A/D Cards			
	812—20-101-0392	Eleven 12-bit analog inputs (0-10V)	
Smart Start D/A Cards			
	812—20-101-0393	Eight 12-bit analog outputs (0-10V)	
Smart Start Field Wiring Terminals			
	812—20-101-0515	Screw-type (A/D, D/A) - RoHS	
	812—20-101-0512	Screw-type (I/O, Relay 8)	

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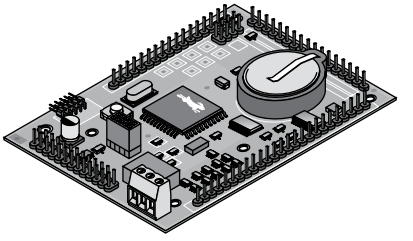
RABBIT Single Board Computers

LP3500 FOX

The LP3500 Fox is a low-power single-board computer designed to operate reliably virtually any place it is deployed, especially where power is limited, such as in portable, hand-held, battery-powered, and remote monitoring systems. The LP3500 features built-in analog and digital I/O and consumes less than 20mA when fully operational and less than 100µA in power-save mode.

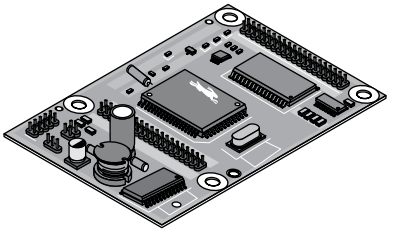
MOUSER STOCK NO.	Rabbit Part No.	Description	Price Each
812-20-101-0525	20-101-0525	512K/512K Analog inputs, Relay - RoHS	
812-20-101-0526	20-101-0526	256K/128K	
Programming/Development Tools			
694-20-101-0580	20-101-0580	RabbitLink Card	
694-20-151-0178	20-151-0178	RS-232-to-USB Converter Cable	
Expansion Boards			
694-20-101-0467	20-101-0467	8 Meg Serial Flash - RoHS	
Mounting/Display			
812-20-101-0466	101-0466	Keypad/Display Unit	
694-20-101-0541	20-101-0541	Panel-Mnt Keypad/Display Unit, 3.3 Volt - RoHS	
694-20-101-0502	20-101-0502	Panel-Mount Keypad/Display Unit, 5 Volt - RoHS	
812-540-0069	540-0069	Keypad/Display Unit Cable 5"	
812-20-101-0431	101-0431	Unibox Enclosure	
812-20-101-0495	20-101-0495	Baseplate	



BL1800 JACKRABBIT

The Jackrabbit is RABBIT's most compact and lowest cost C-programmable single-board computer. The Jackrabbit is the perfect solution for applications that have significant cost and size constraints but need a dependable SBC. Fast number crunching is provided by a Rabbit 2000 microprocessor operating at up to 29.5MHz.

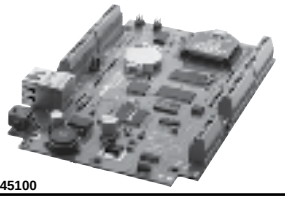
MOUSER STOCK NO.	Rabbit Part No.	Description	Price Each
812-20-101-0356	20-101-0356	BL1800	
812-20-101-0357	20-101-0357	BL1810	
812-101-0814	101-0814	BL1810 512K SRAM	
812-20-101-0358	20-101-0358	BL1820	
Programming/Development Tools			
694-20-101-0580	20-101-0580	RabbitLink Card	
694-20-101-0513	20-101-0513	2mm Programming Cable	
694-20-151-0178	20-151-0178	RS-232-to-USB Converter Cable	
694-151-0113	151-0113	Connector Adapter Board	
Expansion Boards			
694-20-101-0467	20-101-0467	8 Meg Serial Flash	



BL4S100 & BL4S200 SINGLE BOARD COMPUTERS

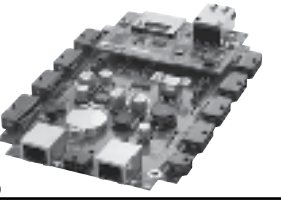
The BL4S100 is a low-cost Rabbit® 4000 microprocessor based single-board computer series that delivers ZigBee and Ethernet capability. On-board ZigBee RF modules offer mesh networking functionality to make networking easy to deploy and simple to maintain. With both Ethernet and ZigBee connectivity integrated onto the BL4S100, the series delivers a low-cost platform to design a ZigBee enabled Ethernet network.

Rabbit's BL4S200 series of single-board computers deliver the features and wireless connectivity to support networking for industrial control applications. In addition to the Ethernet and Fast Ethernet versions, the BL4S200 offers a choice of Wi-Fi and ZigBee enabled wireless networking options. The BL4S200 provides reliable hardware that has been certified by the FCC and other international agencies.



BL45100

BL45100 KIT



BL45200

MOUSER STOCK NO.	Rabbit Part No.	Description	Price Each
BL4S100 Single-Board Computer - ZigBee Enabled Ethernet Gateway			
694-20-101-1255	20-101-1255	BL4S100 512K with XBee	
694-20-101-1256	20-101-1256	BL4S110 512K	
694-20-101-1257	20-101-1257	BL4S150 1M with XBee	
694-20-101-1258	20-101-1258	BL4S160 1M	
BL4S200 Single-Board Computer - Wireless or Wired Connectivity for Industrial Control			
694-20-101-1220	20-101-1220	BL4S200 (RCM4310-based)	
694-20-101-1259	20-101-1259	BL4S210 (RCM4010-based)	
694-20-101-1260	20-101-1260	BL5S220 (RCM5400-based)	
694-20-101-1261	20-101-1261	BL4S230 (RCM4510W-based)	
Development Tools			
694-101-1268	101-1268	BL4S100 Tool Kit	
694-101-1270	101-1270	BL4S200 Tool Kit	
Optional Add-Ons			
694-101-1279	101-1279	BL4S100 Plastic Enclosure	
694-101-1272	101-1272	Mesh Network Add-On Kit	

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RABBIT Single Board Computers and Software

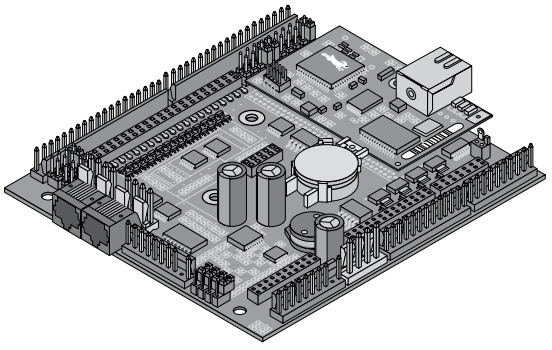
BL2600 WOLF - MODELS BL2600, BL2610

The BL2600 Wolf single-board computer provides embedded systems engineers a complete and expandable performance package. Two standard models-one with 10/100 Ethernet and one without 10/100 Ethernet - feature the Rabbit 3000® microprocessor at 44.2 and 29.4 MHz respectively, with at least 512K Flash and 512K SRAM (standard).

Programming the BL2600
Programs are developed and debugged using industry-proven Dynamic C® software, which runs on a Windows PC. The programming device is connected via a serial cable, a USB cable, or Ethernet. Comprehensive debugging support includes break points, watch expressions and many other extensive features oriented toward real-time embedded systems programming. An extensive library of drivers and sample programs is provided, including a royalty-free TCP/IP stack for network and Internet communications. Full source code is provided for most library routines.

BL2600 Specifications & Features

Feature	BL2600	BL2610
Microprocessor	Rabbit 3000™ at 44.2MHz	Rabbit 3000™ at 29.4MHz
Ethernet Port	10/100Base-T, 3 LEDs	None
Flash Memory	512K (standard)	
SRAM	512K Program Execution, 256K Data	512K (standard)
Backup Battery	Panasonic CR2477 or equivalent 3V lithium coin type, 950mAh, socket mounted	
Configurable I/O	16: Individually software configurable digital inputs @ ±36VDC, 1.5V switching threshold, or sinking digital outputs up to 40V, 200mA each	
Digital Inputs	16: Hardware-configurable pull-up or pull-down, ±36VDC, switching threshold 1.4V typ.	
High-Current Digital Outputs	4: Individually software configurable, +40VDC, 2 A max. per channel, sinking or sourcing	
Analog Inputs	8 channels with 11-bit resolution, software selectable ranges Unipolar: 1, 2, 2.5, 5, 10, 20VDC; Bipolar: ±1, ±2, ±5, ±10VDC; Four of the eight channels maybe hardware-configured for 4-20mA, 12 kHz update rate	
Analog Outputs	4 channels, 12-bit resolution, buffered (0-10 V DC, ± 10VDC), 4-20mA, 12kHz update rate	
RabbitNet	Compatible Expansion Cards: Digital I/O, A/D, D/A, Relay, Keypad Display Interface	
Serial Ports	Up to 5 serial ports: • 1 RS-485 or 1 RS-232 • 2 RS-232 or one RS-232 (with CTS/RTS) • 1 clocked serial port multiplexed to 2 RS-422 SPI master ports • 1 CMOS compatible serial port for programming/debug	
Serial Rate	Max. async = CLK/8, Max. sync = CLK/2	
Real-Time Clock	Yes	
Timers	Ten 8-bit timers (6 cascadable from the first) and one 10-bit timer with 2 match registers	
Watchdog/Supervisor	Yes	
Power	9/36VDC, 25W max. (includes power to RabbitNet expansion boards)	
Operating Temperature	-40° to +70°C (-40° to +85°C without battery)	
Humidity	5-95%, noncondensing	
Connectors	One Ethernet and two RabbitNet™ RJ-45 connectors Two polarized, 9-position with 0.1" pitch friction-lock connectors Three 4-position power terminals with 0.156" pitch friction-lock connectors Two 20-position terminals with 0.1" pitch (and 2 x 20 IDC headers) friction-lock connectors One 13-position terminal with 0.1" pitch (and 2 x 13 IDC header) friction-lock connector One 10-position terminal with 0.1" pitch (and 2 x 7 IDC header) friction-lock connector One 2 x 5 IDC, 1.27 mm pitch (BL2600) programming port One 2 x 5 IDC, 2 mm pitch (BL2610) programming port	
Board Size	4.85" x 4.96" x 1.00" (123 x 126 x 25mm)	



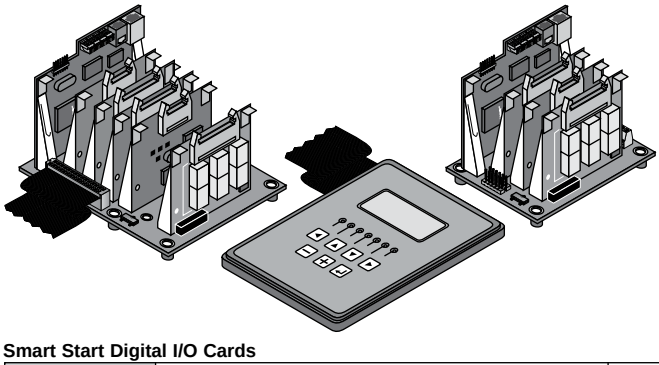
For quantities of 5 and up, call for quote.

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Price Each
BL2600 Wolf Board			
812-20-101-0889		BL2600 Board w/ 10/100Base-T Ethernet - RoHS	
812-20-101-0891		BL2610 Board w/o 10/100Base-T Ethernet - RoHS	
Product Accessories			
812-20-101-0879		RN1600 RabbitNet Keypad/Dsply Interface Card-RoHS	
812-20-101-0688		RN1300 RabbitNet D/A Expansion Card	
812-20-101-0616		RN1200 RabbitNet Digital I/O Expansion Card	
812-20-101-0612		RN1100 RabbitNet Digital I/O Expansion Card	
694-20-101-0468		SF1000 4MB Serial Flash Expansion - RoHS	
694-20-101-0467		SF1000 8MB Serial Flash Expansion	
694-20-101-0580		RabbitLink Card for Remote Debug via Ethernet/Internet - RoHS	
694-20-151-0178		RS-232-to-USB Converter Cable for USB only PCs	
694-20-101-0542		1.27mm Connector for 10/100Base-T Option	
812-20-101-0581		Connectivity Kit	

SR9000 SMART START SYSTEM

The Smart Start is a modular and expandable embedded control system designed for demanding real-time control and data acquisition applications. Multiple I/O card options-including digital, A/D, D/A, and relays-allow users to closely match their specific I/O needs. The Smart Star CPU card comes in both Ethernet and non-Ethernet versions, and a cost-effective keypad/display is also available.

Ethernet connectivity - CPU card with or without Ethernet
Flexible functionality - modular configuration to easily interchange or replace individual I/O cards
Multiple I/O card options - digital I/O, A/D, D/A, relay
Expandable - up to 168 I/O
Cost-effective - low cost per I/O
Optional keyboard/display - backlit 122 x 32 pixel graphic LCD with 7 user-relegendable keys, 7 LEDs



Smart Start Backplane

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Price Each
812—20-101-0512		SR9010 7-slot - RoHS	
812—20-101-0487		SR9050 3-slot	

Keyboard/Display Options

694—20-101-0601	Keypad/Display Unit, 3.3 Volt, No Case - RoHS	
694—20-101-0465	Keypad/Display Unit, 5 Volt, No Case	

Product Options and Accessories

812—101-0504	Cable and Mounting Hardware	
812—540-0069	Keypad/Display Unit Cable 5"	
812—151-0127	Connector Adapter Board	

Smart Start CPU Card

812—101-0815	SR9100 512K SRAM	
812—20-101-0486	SR9150 Ethernet - RoHS	
812—20-101-0738	SR9150 Ethernet, 512K SRAM - RoHS	
812—20-101-0506	SR9160	
812—101-0775	SR9160 512K SRAM	

Programming/Development Tools

694—20-101-0580	RabbitLink Card	
694—20-151-0178	RS-232-to-USB Converter Cable	

Smart Start Digital I/O Cards

MOUSER STOCK NO. Mfr.	Mfr. Part No.	Description	Price Each
812—20-101-0389		16 inputs and 8 outputs, sinking	
812—20-101-0437		16 inputs and 8 outputs, sourcing - RoHS	
812—20-101-0390		8 inputs and 16 outputs, sinking - RoHS	

Smart Start A/D Cards

812—20-101-0392	Eleven 12-bit analog inputs (0-10V)	
812—20-101-0444	Eleven 12-bit analog inputs (4-20mA) - RoHS	

Smart Start D/A Cards

812—20-101-0393	Eight 12-bit analog outputs (0-10V)	
812—20-101-0445	Eight 12-bit analog outputs (4-20mA) - RoHS	

Smart Start Relay Cards

812—20-101-0395	6 relays: 1SPDT, 5 SPST, including snubbers	
812—20-101-0440	8 SPDT relays, no on-board snubbers - RoHS	

Smart Start Field Wiring Terminals

812—20-101-0515	Screw-type (A/D, D/A) - RoHS	
812—20-101-0421	Pluggable (A/D, D/A)	
812—20-101-0512	Screw-type (I/O, Relay 8)	
812—20-101-0420	Pluggable (I/O, Relay 8)	

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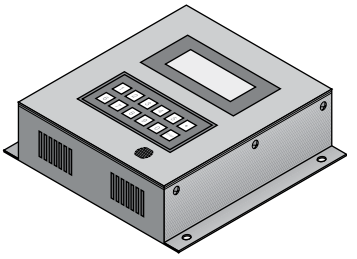
RABBIT Single Board Computers

OP6700 and OP6600 INTELLICOM

The Intellicom is a C-programmable, 12-key graphic display with Ethernet for network connectivity and a VFD option for applications requiring high visibility. To accommodate users' installation preferences, the versatile Intellicom can be either wall or panel mounted.



MOUSER STOCK NO.	Description	Price Each
812-20-101-0411	OP6700	
812-20-101-0412	OP6600	
694-20-101-0467	8 Meg Serial Flash	
694-20-151-0178	RS-232-to-USB Converter Cable	
694-20-101-0580	RabbitLink Card	
812-20-101-0410	Battery Board	

Specifications:

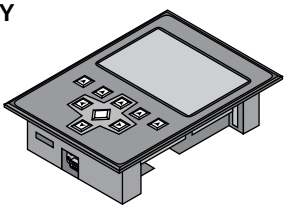
Feature	OP6700	OP6600
Microprocessor	Microprocessor Rabbit 2000 at 18.432 MHz	
Ethernet	Ethernet Port 10Base-T, RJ-45	None
Flash	Flash 512K (2 x 256)	256K
SRAM	SRAM 128K	
Backup Battery	Backup Battery Socketed board with 3V lithium coin-type, 1,000 mA·h, supports RTC and SRAM	
Digital Inputs	4 protected to ±36 VDC	
Digital Outputs	4 sink 200 mA, 40 VDC max.	
Serial Ports	3 total: one 5 V CMOS-compatible (programming) and either two 3-wire RS-232, one 3-wire RS-232 and one RS-485, or one 5-wire RS-232	
Serial Rate	Max. burst rate = CLK/32 Max. sustained rate = burst/2	
Power	9-40 VDC, 2.4 W (backlighting on)	
Operating Temp	0-50°C	
Humidity	5-95%, non-condensing	
Connectors	Screw terminals	
Speaker Outputs	Software-adjustable frequency and volume	
Watchdog/Supervisor	Yes	
Board Size	4.7" x 4.3" x 0.8" (119 x 109 x 20 mm)	
Enclosure	6.7" x 5.7" x 2.0" (170 x 145 x 51 mm)	
Timers	Five 8-bit timers (four cascadable from the first) and one 10-bit timer with 2 match registers	
Real-Time Clock	Yes	

Specifications:

Feature	OP7200	OP7210	OP6800	OP6810
Microprocessor	Rabbit 2000™ at 22.1 MHz			
Ethernet Port	10Base-T, RJ-45			None
Flash	256K			128K
SRAM	128K			
Backup Battery	Socketed 3 V lithium coin-type, 265 mA·h, supports RTC and SRAM, connection for user-supplied external battery		Connection for user-supplied battery (to support RTC and SRAM)	
Keypad/Display	1/4 VGA (320 _ 240 pixels) w/ programmable on/off white LED backlight, 9-key tactile feedback keypad		122 x 32 pixel graphic LCD in two stacked sections (with programmable backlight), user-relegendable keypad with 7-key / 7-LED interface	
	4096 x 4096 analog touchscreen	No touchscreen		
LEDs	4: Power On, Microprocessor Error, Ethernet Link Alive, Ethernet Activity		7 hardware- or software-driven: 1 red, 4 green, 2 yellow	
Digital Inputs	19 protected to ±36 VDC	16 protected to ±36 VDC	13 total: 8 protected to ±36 VDC, 5 protected to ±25 VDC	
Digital Outputs	8: individually configurable in software; sink up to 350 mA, source up to 250 mA, or tri-state; 40 VDC max		11 total: sink 200 mA, 40 VDC max., 4 with built-in inductive load-protection diode	
Analog Inputs	Eight 11-bit single-ended or four 12-bit differential, 200 kW input impedance, 2.5 ksamples/sec. Eight software controlled programmable gain/voltage ranges from 0–1 V to 0–20 V.	None	None	
Serial Ports	4 CMOS-compatible: 1 RS-485 (or I/O expansion port), 2 RS-232 (one 5-wire or two 3-wire), One 5V CMOS-compatible (programmable)			
Serial Rate	Max. burst rate = CLK/32, Max. sustained rate = CLK/64		Max. burst rate = CLK/32 Max. sustained rate = burst/2	
Real-Time Clock	Yes			
Timers	Five 8-bit timers (4 cascadable from the first) and one 10-bit timer with 2 match registers			
Watchdog/Supervisor	Yes			
Power	9-40 VDC or 24 VAC, 4 W max.		9-36 VDC, 1.5 W max.	
Operating Temp	-10° to +65°C		0-50°C	
Humidity	20-70%, noncondensing		5-95%, non-condensing	
I/O Connectors	Screw terminals support max. 14 AWG/ 1.5 mm2 (standard)		2 x 20, 0.1" pitch ribbon-cable header	
Product Size Display Area	5.67" x 4.41" x 1.70" (144 x 112 x 43 mm) 3.0" x 2.2" (76 x 56 mm)		4.5" x 3.6" x 1.33" (112 x 91 x 33 mm) 22 x 32 pixel graphic display	

OP7200 AND OP7210 EDISPLAY

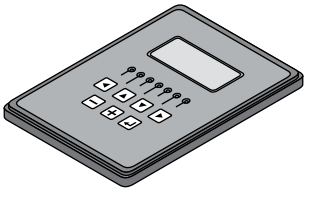
The OP7200 and the OP7210 eDisplay is an intelligent operator interface that offers rugged I/O, built-in Ethernet connectivity, and optional A/D and touchscreen capabilities. The compact eDisplay is an ideal data acquisition and display device for OEM products and stand-alone systems such as factory floor controls. The unit's 10Base-T Ethernet facilitates remote diagnostics, control, and communication, including sending and receiving E-mails and alerts.



MOUSER STOCK NO.	Description	Price Each
812-20-101-0535	Touchscreen	
812-20-101-0537	Touchscreen 512K/512K	
812-20-101-0536	OP7210, RoHS	
812-20-101-0538	OP7210 512K/512K	
812-101-0543	OP7200 Tool Kit (board not included)	
812-20-101-0688	RabbitNet D/A Expansion Card	
812-20-101-0616	RabbitNet A/D Expansion Card	
812-20-101-0612	RabbitNet I/O Expansion Card, RoHS	
694-20-101-0467	8 Meg Serial Flash	
812-20-101-0879	RN1600 RabbitNet Relay Keypad/Display, RoHS Interface Card	
694-20-151-0178	RS-232-to-USB Converter Cable	
694-20-101-0580	RabbitLink Card	
812-101-0887	RN1600 RabbitNet Expansion Kit	

OP6800 and OP6810 MINICOM

The OP6800 and OP6810 MiniCom is a low-cost, C-programmable operator interface and single-board computer that offers Ethernet connectivity, plenty of industrialized I/O, a graphic LCD, and keypad. The MiniCom's compact 4.5" x 3.6" (112 x 91 mm) form factor makes it ideal for use in designs and areas with size constraints. Available in both Ethernet-enabled and non-Ethernet versions, the MiniCom provides comprehensive integrated control, display, and networking capabilities via Internet/Ethernet or serial communications.



MOUSER STOCK NO.	Description	Price Each
812-20-101-0654	OP6800 512K/512K, RoHS	
812-20-101-0497	OP6810, RoHS	
812-101-0505	OP6800 Proto Board	
694-20-151-0178	RS-232-to-USB Converter Cable	
694-20-101-0580	RabbitLink Card	
694-20-101-0467	8 Meg Serial Flash	

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